SPECIAL EatingWell EDITION

Heart Health

Don't Fear Fat • Workout Tips
Understanding Salt

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EASY MEAL PLANS

SPECIAL EatingWell EDITION

Heart Health

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INTRODUCTION

HEALTHY HEARTS, HEALTHY SELVES

The strategies to protect against heart problems are well within our reach. A few key lifestyle changes can make all the difference, from treatment to prevention.

BY JOYCE HENDLEY

In language and literature, the heart has always been essential to the sense of being. It's believed to be the seat of human emotions, the place where love originates and compassion thrives. But quite practically, your heart is one of the most critical and hardest-working organs in your body. It beats some 2.5 billion times in the average lifetime, pumping blood to every cell, 24-7. That's why protecting your heart is one of the most powerful ways to stay healthy. Luckily, health experts and solid science continue to uncover more and more ways to keep your hardworking heart healthy—and from treatment to prevention, they're finding that much is possible.

Many of the strategies and tools to avoid heart problems—or at least lessen their impact—are already well within reach. It's imperative that we use those tools: heart disease is the country's number-one killer, causing some 600,000 deaths each year. According to the American Heart Association, nearly half of us (48%) live with some kind of heart condition already. However, despite a worldwide decline in heart-related deaths in recent years, in the U.S. they've increased slightly at last count. Much of this can be ascribed to new, lower cutoff numbers defining high blood pressure that qualify more people as having the disease, but it also speaks to the reality that heart disease is a continuing challenge for many.

The face of heart disease is changing too. While men have traditionally been considered more at

IF YOU'RE WATCHING YOUR WEIGHT (WHICH ALSO HELPS YOUR HEART), MOST FRUITS AND VEGETABLES ARE LOW IN CALORIES AND PROVIDE A FAIR AMOUNT OF SATISFYING FIBER.

risk, heart disease is also a growing risk for women, causing 1 out of every 5 female deaths. (Women tend to develop heart problems at an older age than men, and they often live longer, which may explain some of the gender differences.)

Despite those sobering statistics, there's also a lot of hope: heart disease is one of our most manageable health issues. Experts say that as much as 80% of heart problems can be prevented by managing risk factors that have long been on our radar and by making lifestyle changes to lessen those risks. Here's what we know is in our power to control.

The three biggest risk factors for heart disease are high blood pressure, high blood levels of LDL ("bad") cholesterol and smoking. Statistics suggest that some 47% of Americans have at least one of these risk factors already. Other factors that increase your risk include having diabetes, being overweight or obese, eating a poor diet, being physically inactive and using alcohol excessively. Sure, some of these risks are unavoidable; if high blood pressure runs in your family, for example, you can't change your genetics. But because a healthy lifestyle is a key part of managing these risk factors, there is likely lots you can do to lessen your odds of developing heart problems even if you are predisposed.

IT ALL BEGINS WITH WHAT EXPERTS CALL "GOOD health hygiene": working with your doctor to manage high blood pressure and high blood sugar, taking medications if necessary, losing weight if you need to, making physical activity a part of your life if it isn't already and, if you're a smoker, making quitting a top priority.

And, of course, healthy food choices can make a huge impact on your heart's health, as well as on the length and quality of your life. Despite what you might have heard, the fundamental recommendations about heart-healthy eating haven't changed much over the years. Many are rooted in the ways people have been eating for centuries—such as the healthy (and delicious!) eating patterns found in so-called Blue Zone regions like Ikaria, Greece, and Okinawa, Japan, where residents tend to live longer, healthier lives.

Distilled from those centuries of intuitive-eating wisdom, here are some of the most powerful and simple dietary changes that can help keep your heart healthy.

One of the most important steps you can take is to eat a bounty of fruits and vegetables. Instead of the time-honored "five servings a day" recommendation, think higher—more like seven to nine a day, say experts. Most fruits and vegetables are rich in nutrients shown to be heart-protective, including vitamins C and E, folic acid, potassium and magnesium. They're also among nature's best sources of heart-healthy antioxidant compounds, such as polyphenols and carotenoids, which may protect the heart by helping prevent LDL cholesterol from oxidizing into a more artery-damaging form.

Be sure to include whole grains, beans and legumes in your eating plan. All are key sources of fiber—both insoluble and soluble types—which helps the heart by lowering blood pressure and reducing cholesterol levels. They're also good sources of minerals that can help keep blood pressure under control, including potassium, magnesium and calcium.

Experts say that up to 80% of heart problems can be prevented by managing risk factors that have long been on our radar.

Reducing your intake of refined carbohydrates—sugary treats and starchy carbohydrates, such as white-flour breads, pastas and cereals—can also help your heart. A diet that contains too many of these quick-digesting carbs is associated with higher levels of inflammation in the body and a greater risk of heart-related events. Added sugars are a particular risk: a recent study looking back on more than 30 years of data from the National Health and Nutrition Examination Survey, one of the nation's biggest surveys measuring health and nutritional status, found that people who took in 25% or more of their daily calories as sugar (not hard to do if you're a regular soda drinker) were more than twice as likely to die from heart disease as those whose diets got less than 10% of calories from sugar.

On the positive side, swapping out those refined carbohydrates with whole or less-processed ones can have positive benefits for your heart health. A recent, decade-long study of more than 17,000 adults reported that those who ate the highest proportion

of whole grains in relation to their total carb intake had a 47% lower risk of heart disease than their peers who rarely ate whole grains.

Your heart will benefit, too, if you are moderate with salt. Solid scientific evidence continues to show that reducing sodium can help you keep your blood pressure under control, lowering your risk of heart attack, heart failure and other health problems. Since most of the sodium in our diets comes from processed foods, you'll automatically cut out a lot by eating more home-cooked meals.

You'll also help keep your heart healthier by minimizing your intake of meat, particularly red meats, such as beef, pork and lamb. All are fairly high in saturated fat, which can raise blood levels of LDL and, with it, the risk of a heart attack. Red meat may also raise your levels of trimethylamine N-oxide (TMAO), a chemical formed by gut bacteria that's been linked to higher rates of heart disease.

One study suggests that polyphenol compounds in chocolate may also help lower blood pressure by helping blood vessels relax.

But you don't have to forgo meat and the nutrients it provides. Instead, experts recommend taking a page from the Blue Zone regions' eating patterns by making lean meat a supporting player rather than the star of your plate. (Think of a hearty minestrone that's mostly vegetables, with a little pork for flavoring.)

Eggs used to be mostly restricted for anyone concerned about heart health, since they're fairly high in cholesterol and high blood cholesterol is associated with a higher risk of heart attacks. But nutrition researchers have since come to understand that for most people, the cholesterol we get from food doesn't affect our blood-cholesterol levels. The American Heart Association now suggests that eating an egg a day (or two egg whites) as part of a healthy diet is fine, as long as you don't have other heart-related risk factors, such as diabetes or a history of heart problems.

Choosing unsaturated fats is another strategy to keep your heart healthy; they can help boost your blood levels of HDL ("good") cholesterol, and when you use them in place of saturated fats, they can lower triglycerides, another factor related to heart-disease risk. Look for fats that are liquid at room temperature—such as olive, canola, peanut and high-oleic safflower oils—and foods like avocados and nuts. Omega-3s—another type of unsaturated fat, found in fatty fish and seeds like chia, hemp and flax—may also play a role in preventing some types of stroke or heart-rhythm problems, as well as help lower blood pressure.

But take heart: a cardio-friendly diet still has room for chocolate. Dark chocolate, which has a high amount of cocoa solids, contains a fair amount of flavonols—antioxidant compounds that are linked to a lower risk of heart disease. One study suggests that polyphenol compounds in chocolate may also help lower blood pressure by helping blood vessels relax. That said, enjoy your chocolate in moderation; it's still a source of sugary calories, which can offset the heart-healthy benefits pretty quickly. Most experts recommend no more than an ounce or two of chocolate per day, the darker the better.

And the occasional alcoholic drink may have some benefits for your heart, though the research isn't yet clear. Cultures where wine (particularly red wine) is regularly and moderately consumed with food tend to have lower rates of heart disease, and some studies suggest that moderate alcohol consumption—up to one drink per day for women and up to two for men—can slightly boost HDL levels.

Note, though, that heavier drinking can raise blood pressure and triglycerides and increase your risk of stroke (along with other serious conditions, like alcoholism and cancer). There's no reason to start drinking if you don't now, since there are plenty of lower-risk ways to keep your heart healthy. But if you do drink occasionally, here's a (moderately sized) toast to your heart health!

One last thing we can do to keep our hearts healthy isn't about food, but it happens every time we share our table with others: staying connected with each other. Studies show that having a variety of social bonds—with friends, family, colleagues, neighbors—is associated with lower risks of heart problems.

It's no surprise that our social well-being and our heart health are intimately connected; after all, the heart has always been associated with love. Caring for our hearts is truly loving ourselves and increasing our ability to be with those we love.

May you enjoy your meals, with all your heart. ●

HEART HEALTH BY THE NUMBERS

These stats and figures show that while heart-disease numbers are scary, there's also much that can be done to fight it.

BY EMILY JOSHU

In the U.S., someone has a heart attack every

40

seconds.

CDC

Just

5–10

minutes of running at a low speed each day could reduce the risk of death from heart disease.

JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY, 2014

Only about

1 in 6

eligible patients participate in cardiac rehab.

CIRCULATION, 2018

The Department of Health and Human Services' 2018 Physical Activity Guidelines for Americans recommend at least

150

minutes of exercise per week.

In 2014 in the U.S., pulmonary embolism was the principal diagnosis in

178K

hospitalizations.

AMERICAN COLLEGE OF CARDIOLOGY

People who attended 36 sessions of cardiac rehabilitation following a heart attack or other related cardiac event had a

47%

lower risk of death and a 31% lower risk of a repeat heart attack than those who attended just one session.

MILLION HEARTS

Women who followed a DASH (Dietary Approaches to Stop Hypertension) diet had a

21%

lower risk of heart disease and a 19% lower risk of stroke.

REVIEW IN THE JOURNAL *NUTRITION*, 2013

CHAPTER 1

DECODING YOUR HEART

From cholesterol numbers to little-known heart-health dangers, here's what you need to know to keep beating strong.

YOUR GUIDE TO A HEALTHY HEART

The heart works to keep the body functioning, but sometimes things can go awry. Here's what you need to know to keep your heart healthy for years to come.

BY HALLIE LEVINE

Your heart is amazing. It beats about 100,000 times a day and pumps about 1.5 gallons of oxygen-rich blood through 60,000 miles of blood vessels each minute. When it's in tip-top shape, it works seamlessly to pump blood throughout your body, providing oxygen and other valuable nutrients that help you power through the day. "I always tell my patients that we live from our hearts, so it's important to nurture them," says Suzanne Steinbaum, M.D., a cardiologist in New York City and a spokesperson for the American Heart Association. "When we take care of our heart, we're taking care of our entire body from head to toe." Here's a look at how your heart works, how things can go awry (and what to do about them) and the heart-healthy numbers you need to know to keep your ticker ticking away for decades.

How Your Heart Works

Your heart has two distinct sides—left and right, separated by a muscular wall—as well as an upper and lower chamber on each side connected by valves that direct the flow of blood. The upper chambers are called atria and the lower chambers are called ventricles. The right side of your heart pumps blood to your lungs, where the blood receives oxygen. Blood then enters the left side of your heart, which in turn pumps the oxygen-rich blood to the rest of your body.

Blood flows through your heart and lungs in four stages: your right atrium receives low-oxygen blood from the body and pumps it to the right ventricle through the tricuspid valve. Next, the right ventricle pumps the oxygen-poor blood to the lungs through the pulmonary valve. Then the left atrium receives the newly oxygen-rich blood from

the lungs and pumps it to the left ventricle through the mitral valve. And in the last step, the left ventricle pumps the oxygen-rich blood through the aortic valve out to the entire body. When your heart functions normally, all four chambers work in tandem to keep oxygen-rich blood circulating throughout your body. Your heart also has an electrical system, which helps it maintain a normal, healthy rate and keeps it beating in a regular rhythm.

When Things Go Wrong

If you are young, are at a healthy weight, work out regularly and don't have a chronic condition like high blood pressure or type 2 diabetes, chances are good that your heart is working properly. But sometimes things can malfunction, including problems with your heart's electrical system. This can cause an arrhythmia, which means that your heart is beating too fast, too slowly (bradycardia) or simply irregularly. Symptoms can include feeling as if your heart has skipped a beat, a "fluttery" sensation in your chest, shortness of breath and even fainting. Your doctor can diagnose this through tests, such as an electrocardiogram (ECG), in which a machine records your heart's rhythm onto paper through sticky electrodes that are placed on your chest, arms and legs.

Over time, the high level of glucose in the blood from type 2 diabetes damages blood vessels, raising the risk of heart disease.

Leaky valves are also a potential issue: 2% to 3% of the population have a condition called mitral-valve prolapse, in which one of the valve leaflets is enlarged, preventing it from closing properly. (It's sometimes called click murmur syndrome, after the sound the valve makes as it closes.) About 85% to 90% of the time, no treatment is needed. But if you have symptoms, such as heart palpitations, fatigue, dizziness and shortness of breath, you may require heart surgery.

Sometimes the heart muscle can be weak. The most common cause of this is dilated cardiomyopathy, occurring mainly in adults ages 20 to 60. The heart muscle dilates, causing chambers to enlarge and weakening the heart. This can be caused by a viral infection, pregnancy or even another condition, such as diabetes or thyroid disease. Symptoms include shortness of breath, ankle swelling and chest pain. It can be treated with a variety of heart medications, including blood-pressure drugs and blood thinners, but in some cases you may require heart surgery or need a pacemaker installed.

Your heart muscle gets the blood it needs to do its job from the coronary arteries, the main vessels that feed blood to your heart. But over time, they can narrow or even become blocked due to the buildup of cholesterol and fatty deposits (plaque) on their inner walls. This in turn restricts blood flow to the heart, explains Leslie Cho, M.D., director of the Cleveland Clinic's Women's Cardiovascular Center.

If your ticker's not getting enough blood, it becomes starved of oxygen, causing chest pain known as angina. When one of your coronary arteries is completely blocked, the flow of blood to your heart muscle stops completely. As a result, the part of the heart muscle supplied by that artery begins to die, causing permanent damage. If the blockage occurs in a blood vessel that feeds your brain, then it's called an ischemic stroke (the most common type of stroke). When this happens, some of your brain cells start to die and you can permanently lose some brain functions, including such skills as walking or talking.

Know Your Numbers

The best way to protect yourself against heart disease is to become familiar with the heart-healthy numbers. The main way your doctor calculates whether you are overweight is by measuring body mass index, or BMI. This method estimates your body fat by calculating a specific ratio of your weight to your height (a healthy BMI is considered anything between 18.5 and 24.9). But even if your BMI is normal, you're not in the clear. Research suggests your waist size may be just as important, if not more. A study of more than 155,000 postmenopausal women published in the medical journal *JAMA Network Open* in July 2019 found that those with a normal BMI but whose waist circumference was over 35 inches were almost a third as likely to die from cancer or heart disease as those with smaller waists who were also at a healthy

weight. This is most likely because fat around the abdomen is visceral fat, a particularly dangerous type of fat because it causes your body to secrete stress hormones that in turn raise your blood pressure and blood-glucose levels, says Cho.

Blood pressure is another must-know heart-health figure. The American Heart Association and the American College of Cardiology released new guidelines in 2017 recommending that everyone—regardless of age—aim for a blood pressure lower than 120/80 mmHg. "We know now that people whose blood-pressure level is between 130–139/80–89 have double the risk of heart attack or stroke as those whose blood pressure is under 120/80," explains Johanna Contreras, M.D., a cardiologist at Mount Sinai Hospital in New York City. That's because damage to blood vessels begins as soon as blood pressure is elevated. "The strain from high blood pressure causes the arteries to slowly become narrowed from plaque, which makes it more likely that you'll develop a blood clot that can trigger a heart attack or stroke," she says. If your blood pressure is high but under 140/90, then you should focus on lifestyle changes, such as losing weight, eating a low-salt diet (under 1,500 mg a day), getting a minimum of 150 minutes of exercise each week and limiting alcohol to less than one to two drinks a day. Diet is particularly key: a 2017 Johns Hopkins study published in the *American Journal of Cardiology* of more than 400 adults with mild hypertension found that combining a low-salt diet with the heart-healthy DASH diet lowered blood pressure as much as medication.

While just a few years ago, physicians focused on your total cholesterol as a measure of heart health, as well as levels of your HDL ("good") cholesterol and LDL ("bad") cholesterol, now the emphasis has really shifted to LDL levels. But you should still focus on having a total cholesterol under 200, with an LDL below 100 and an HDL of about 60. "Your good cholesterol is like a vacuum cleaner—it sucks all the bad cholesterol out of your blood vessels," explains Cho.

Over time, the high blood glucose from type 2 diabetes damages your blood vessels, raising your risk of heart disease, says Cho. That's why it's so important to make sure your blood-glucose levels are normal and to get them under control if you're starting to develop type 2 diabetes (a condition known as prediabetes). The best way to check your blood-glucose levels is through an A1C test. This blood test, which doesn't require fasting, indicates your average blood-sugar level for the past two to three months. Anything under 5.7 is considered normal, says Contreras. If yours is creeping up, take action. People with prediabetes who lose around 7% of their body weight by consuming less fat and fewer calories and exercising for 150 minutes a week have a 58% lower risk of developing full-blown diabetes.

If this sounds daunting, consider the fact that every little bit counts—and even just knowing all your numbers puts you ahead of the game. ●

RECIPE FOR HEART HEALTH: CHOLESTEROL NUMBERS

Choosing certain foods can help cholesterol levels add up in your favor.

BY KAREN ANSEL, M.S., R.D.N.

Many factors affect your cholesterol levels. Some, like genes and age, can't be helped, but others, such as diet and weight, are decidedly in your control. "Research shows that certain dietary strategies can lower harmful LDL cholesterol by as much as 20 to 30%," says Wahida Karmally, Dr.PH., R.D., director of nutrition at Columbia University. More positive news: today's cholesterol-control strategy is a far cry from the restrictive regimens of yesteryear. Now the focus is more on what you *can* eat than on what you can't.

Cholesterol 101

Cholesterol is a vital nutrient your body needs the same way it requires calcium for strong bones. Your liver produces between 800 and 1,500 mg of cholesterol daily. Each day, you should aim to obtain no more than 300 mg from food. "Cholesterol is a good thing," says Richard A. Stein, M.D., the director of Urban Community Cardiology at New York University School of Medicine. "You use it to make bile, some hormones and the membranes that line your cells. But you want to have enough to meet your body's needs, not so much that it builds up in your arteries."

While you've heard of "good" and "bad" cholesterol, the way cholesterol travels in your body is what makes it "good" or "bad." Cholesterol is carried by lipoproteins, packages of fats that circulate in your bloodstream, delivering cholesterol to cells in need. High-density lipoprotein (HDL) sweeps through your bloodstream, soaking up unused cholesterol and taking it to your body's cholesterol-control center, the liver, where it's recycled from your body. Low-density lipoprotein (LDL) roams

the bloodstream and deposits cholesterol where it's needed, and sometimes where it's not, such as the walls of your arteries. There it can build up as plaque, narrowing arteries and reducing blood flow, raising the risk of stroke and heart disease. When experts talk about lowering cholesterol, they're not referring to total cholesterol. They mean LDL.

HDL and LDL aren't the only types of lipoproteins circulating in our blood. There are others, too, such as very-low-density lipoprotein (VLDL), intermediate-density lipoprotein (IDL) and lipoprotein(a). Your doctor may not be measuring these now, but he or she may do so sometime in the distant future. Emerging research reveals that all three are associated with an increased risk of developing heart disease. So are triglycerides, another type of lipoprotein typically tested along with cholesterol. Your body turns excess calories from food into triglycerides and stores them in fat cells to be used as a backup source of energy.

"A diet that combines soluble fiber, phytosterols, nuts and soy protein can make an enormous difference."

How Food Affects Cholesterol Levels

Not too long ago, experts believed that eating more cholesterol caused cholesterol to accumulate in the bloodstream and on artery walls. That meant foods high in cholesterol but otherwise heart-healthy, like eggs and shrimp, were considered taboo. After all, cholesterol in food is structurally identical to cholesterol in the bloodstream (minus the lipoproteins that carry it). However, as research has matured in recent years, scientific opinion has changed. "The relationship between cholesterol levels and dietary cholesterol isn't as strong as we once thought," says Cindy Moore, M.S., R.D., director of nutrition therapy at the Cleveland Clinic Foundation.

Many factors, including genes, play a role in your cholesterol level, but it's largely influenced by the kind of fat you eat. Two helpers are monounsaturated fats (found in olives, avocados and olive and canola oils) and polyunsaturated fats (found in vegetable oils, soybeans, fish, shellfish and seeds). Nuts are rich sources of both. Of the two, monounsaturates are especially beneficial, raising HDL and lowering LDL. As long as most of the fats in your diet are heart-healthy mono- and polyunsaturates, you can consume between 20% and 35% of your calories from fat, according to the USDA's Dietary Guidelines for Americans.

Just as some fats are positive, others are problematic. "When it comes to elevated LDL, trans and saturated fats are the real culprits," Moore says. Reducing saturated fat to 7% of calories (15 grams in a 2,000-calorie-per-day diet) can lower LDL by as much as 10%, according to an American Heart Association report.

Helpful Nutrients and Foods

In addition to unsaturated fats, certain other nutrients and foods have potent cholesterol-reducing mechanisms. "A diet that combines soluble fiber, phytosterols, nuts and soy protein can make an enormous difference," says David J.A. Jenkins, M.D., Ph.D., Canada Research Chair in nutrition and metabolism at the University of Toronto.

Soluble fiber traps bile acids (compounds we need to digest fat) and shuttles them out of the body. Because bile acids are made from cholesterol, your liver taps into your body's cholesterol supply to make more of them, lowering overall levels. Experts recommend roughly 10 grams of soluble fiber per day from foods like oats, barley, psyllium, flaxseed, okra and eggplant.

Phytosterols and stanols block absorption of cholesterol from the food we eat. While a plant-rich diet with lots of nuts and seeds supplies about 1 gram a day, most of us need enriched foods, such as spreads, yogurt and orange juice, to acquire the 2 grams a day that can help lower cholesterol by approximately 10%.

"Nuts are like cholesterol-lowering pills because of their monounsaturated fats and vegetable protein," Jenkins says. Soy is cholesterol-free, low in saturated fat and high in fiber, making it an excellent meat substitute.

Combining these foods with a diet low in saturated fat may help deliver an even greater edge. "When you add the benefits of a diet low in saturated fat, you get another 10% reduction," Jenkins says. ●

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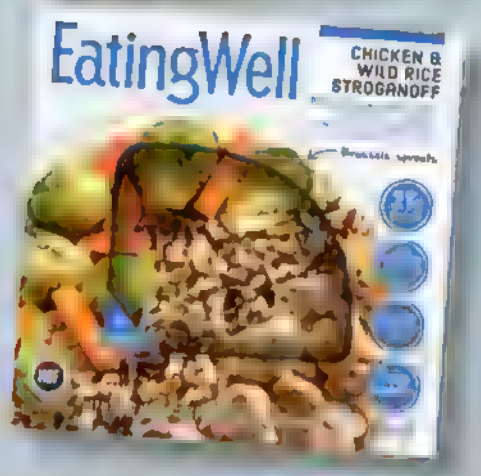


5 Things Every Woman Should Know About Her Heart

Friendships are protective, your health during pregnancy matters, and other surprising truths about staying clear of cardiovascular disease.

BY HALLIE LEVINE

You know the basics of heart disease: it's the number-one killer of women; you're at risk if you have high blood pressure, high cholesterol or both; and you can improve your odds by staying slim and exercising. But there are other factors that can damage your ticker that no one ever tells you about. "Many women—and their doctors—assume that because they're thin and don't smoke, they're at low risk of heart disease, but that's not always the case," says Nieca Goldberg, M.D., the medical director of the NYU Langone Medical Center's Joan H. Tisch Center for Women's Health. Here, five facts to learn right now.

1 EVEN THIN WOMEN CAN BE AT RISK

Yes, being overweight or obese is a major risk factor for heart disease. But "there are plenty of women walking around who are thin and have high blood pressure or elevated cholesterol," notes Goldberg. Sometimes it boils down to genetics—if high cholesterol or hypertension runs in your family, you'll be more susceptible too.

You can also have a normal body mass index (BMI) but still have high amounts of visceral fat—the body fat stored deep within your abdomen that nestles around your liver, pancreas and intestines. This type of fat is considered particularly dangerous because it secretes cytokines, inflammatory substances that are toxic to your heart, explains Ian Neeland, M.D., a cardiologist at the University of Texas Southwestern Medical Center in Dallas. A 2016 study found that people with greater increases in visceral fat over six years had more substantial elevations in metabolic risk factors, such as high blood sugar and high triglycerides, than those whose visceral fat stayed fairly stable.

2 BEING LONELY AND DEPRESSED ISN'T GREAT FOR YOUR HEART

This just in: middle-aged women with depression are at higher risk of heart disease, suggests a study presented in 2016 at the North American Menopause Society's annual meeting. Loneliness and social isolation are also linked to a 29% greater risk of a heart attack, according to a review of research published in April 2016 in the medical journal *Heart*.

There are a few theories as to why. Both conditions increase levels of stress hormones, such as cortisol and adrenaline, which can raise blood pressure and inflammation, points out Suzanne Steinbaum, D.O., the director of women's heart health at Northwell Lenox Hill Hospital in New York City and a spokesperson for the American Heart Association's Go Red for Women campaign. It may also be that people who are lonely or depressed are less likely to do things to look after themselves, like eat well, exercise and take their medications, and more likely to smoke and drink excessive alcohol.

3 YOUR HEALTH DURING PREGNANCY IS AN IMPORTANT CLUE

Did you have high blood pressure, preeclampsia or gestational diabetes during pregnancy? According to a study published in June 2016 in

the journal *Hypertension*, pregnant women who experience even small increases in blood pressure during pregnancy may be at high risk of developing metabolic syndrome (a combination of heart-disease risk factors, including a large waistline, low HDL cholesterol and high triglycerides, blood sugar and blood pressure) after giving birth. "Pregnancy is a stress test for your body—if you're predisposed to heart disease, it may show up now, under the strain of weight gain and hormonal changes," says Deborah Kwon, M.D., a cardiologist at the Cleveland Clinic.

4 SLEEP MATTERS FOR YOUR HEART HEALTH

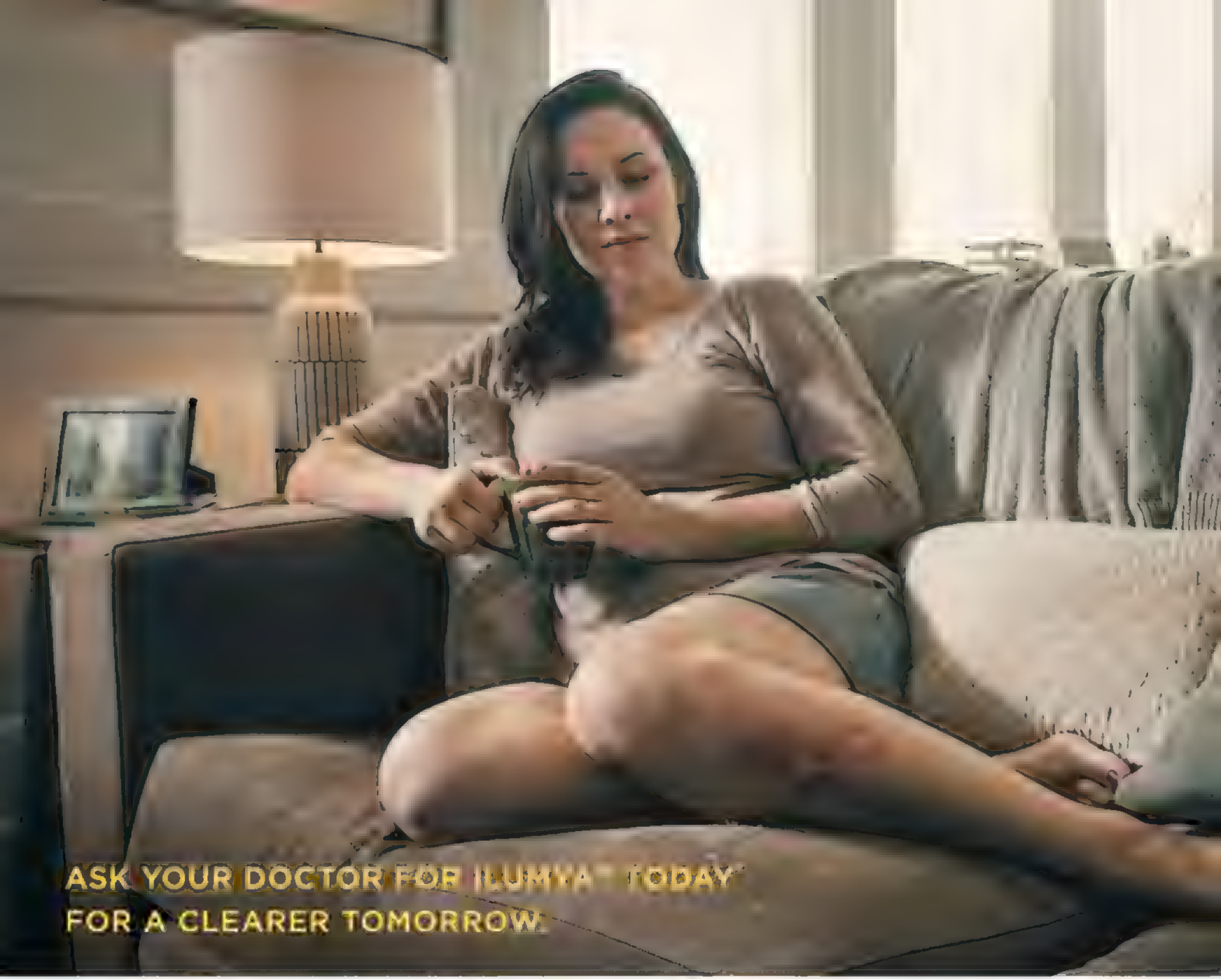
Sleep deprivation raises levels of cortisol and inflammatory cytokines, both of which promote the development of heart disease by increasing blood-sugar levels and blood pressure, explains Goldberg. In fact, people who get five or fewer hours of sleep a night have 50% more calcium in their coronary arteries—an early marker of heart disease—than those who clock seven hours of slumber a night, according to a 2015 Korean study. Too much sleep may be a problem too. The study found that folks who snoozed nine or more hours a night had 72% more coronary calcium than those who slept seven hours.

It's not just how much you sleep—it's also how well you sleep. The same Korean study revealed that people who reported poor sleep quality had about 20% more calcium in their arteries than those who snoozed well. That's no surprise, because people who toss and turn may have undiagnosed sleep apnea, which is also linked to heart disease, notes Goldberg.

5 NEARLY HALF OF ALL HEART ATTACKS ARE SILENT

About 45% of heart attacks have such mild symptoms that they go unnoticed, according to a Wake Forest Baptist Medical Center study published in 2016. Researchers analyzed the medical records of nearly 9,500 middle-aged Americans—more than half of them women. They discovered that, over an average of nine years, while 386 patients had heart attacks with clinical symptoms, 317 had "silent" heart attacks, meaning the heart attacks were diagnosed after the fact, with tests like electrocardiograms, but weren't acknowledged by the people themselves.

The take-home message? If you have risk factors (such as a family history of heart attacks at a young age, high blood pressure, high cholesterol or type 2 diabetes) and experience subtle, vague symptoms, such as shortness of breath, back pain, jaw pain, nausea or fatigue, get checked out. "I had one patient whose jaw hurt every time she got on a treadmill," says Steinbaum. "Once she stopped, her jaw pain would go away. Her dentist told her that her teeth were fine; it wasn't until she ended up in my office that we made the connection to her heart." ●



WHAT IS ILUMYA?

ILUMYA is a prescription medicine used to treat adults with moderate to severe plaque psoriasis who may benefit from taking injections, pills (systemic therapy), or phototherapy (treatment using ultraviolet or UV light)

IMPORTANT SAFETY INFORMATION

What is the most important information I should know about ILUMYA?

Do not use ILUMYA if you have had a severe allergic reaction to ILUMYA or any of its ingredients

Get emergency medical help right away if you get any of the following symptoms of a serious allergic reaction:

- feel faint
- trouble breathing or throat tightness
- swelling of your face, eyelids, lips, mouth, tongue or throat
- chest tightness
- skin rash

ILUMYA is a medicine that may lower the ability of your immune system to fight infections and may increase your risk of infections Your healthcare provider should check you for infections and tuberculosis (TB) before starting treatment with ILUMYA and may treat you for TB before you begin treatment with ILUMYA if you have a history of TB or have active TB. Your healthcare provider should watch you closely for signs and symptoms of TB during and after treatment with ILUMYA

Tell your healthcare provider right away if you have an infection or have symptoms of an infection, including

- fever, sweats, or chills
- muscle aches
- weight loss
- cough
- warm, red, or painful skin or sores on your body different from your psoriasis
- diarrhea or stomach pain
- shortness of breath
- burning when you urinate or urinating more often than normal
- blood in your phlegm (mucus)

Before receiving ILUMYA, tell your healthcare provider about all of your medical conditions, including if you:

- have any of the conditions or symptoms listed in the section **"What is the most important information I should know about ILUMYA?"**
- have an infection that does not go away or that keeps coming back
- have TB or have been in close contact with someone with TB
- recently received or are scheduled to receive a vaccine (immunization) You should avoid receiving live vaccines during treatment with ILUMYA

TAKE FLAKES OUT OF YOUR MORNING ROUTINE.

4 DOSES A YEAR
— AFTER —
2 INITIAL DOSES

6 OUT OF 10
— PEOPLE WERE —
CLEAR OR ALMOST CLEAR AFTER 2 DOSES
(AT 12 WEEKS)

FOR ADULTS WITH MODERATE-TO-SEVERE PLAQUE PSORIASIS

- are pregnant or plan to become pregnant. It is not known if ILUMYA can harm your unborn baby
- are breastfeeding or plan to breastfeed. It is not known if ILUMYA passes into your breast milk

Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements

It is not known if ILUMYA is safe and effective in children under 18 years of age.

What are the possible side effects of ILUMYA?

ILUMYA may cause serious side effects. See "What is the most important information I should know about ILUMYA?"

The most common side effects of ILUMYA include: upper respiratory infections, injection site reactions and diarrhea. These are not all of the possible side effects of ILUMYA. Call your doctor for medical advice about side effects.

You are encouraged to report any negative side effects of ILUMYA to FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088. You are also encouraged to report side effects or ADEs (adverse drug events) to our Drug Safety Department at 1-800-406-7984 or drug.safetyUSA@sunpharma.com (preferred) with as much information as available.

Please read Brief Summary of the full Prescribing Information for ILUMYA on the next page and discuss any questions with your doctor.

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PM-US-ILY-0631 10/2019

ILUMYA™
tildrakizumab-asmn
Injection 100 mg/mL

LEARN MORE AT ILUMYA.COM

Consumer Brief Summary

The risk information provided here is not comprehensive. This information does not take the place of talking with your doctor about your medical condition or treatment

To learn more about ILUMYA™ (tildrakizumab-asmn), talk to your doctor or pharmacist. For more information and to obtain the FDA-approved product labeling, call 888-726-2299 or visit www.ilumya.com

What is the most important information I should know about ILUMYA?
ILUMYA may cause serious side effects, including:
Serious allergic reactions. Get emergency medical help right away if you get any of the following symptoms of a serious allergic reaction:

- feel faint
- swelling of your face, eyelids, lips, mouth, tongue or throat
- skin rash
- trouble breathing or throat tightness
- chest tightness

Infections. ILUMYA is a medicine that may lower the ability of your immune system to fight infections and may increase your risk of infections. Your healthcare provider should check you for infections and tuberculosis (TB) before starting treatment with ILUMYA and may treat you for TB before you begin treatment with ILUMYA if you have a history of TB or have active TB. Your healthcare provider should watch you closely for signs and symptoms of TB during and after treatment with ILUMYA.

Tell your healthcare provider right away if you have an infection or have symptoms of an infection, including:

- fever, sweats, or chills
- cough
- shortness of breath
- blood in your phlegm (mucus)
- muscle aches
- warm, red, or painful skin or sores on your body different from your psoriasis
- weight loss
- diarrhea or stomach pain
- burning when you urinate or urinating more often than normal

See **"What are the possible side effects of ILUMYA?"** for more information about side effects.

What is ILUMYA?
ILUMYA is a prescription medicine used to treat adults with moderate to severe plaque psoriasis who may benefit from taking injections, pills (systemic therapy) or treatment using ultraviolet or UV light (phototherapy). It is not known if ILUMYA is safe and effective in children under 18 years of age.

Do not use ILUMYA if you have had a severe allergic reaction to tildrakizumab or any of the other ingredients in ILUMYA. See the end of this Medication Guide for a complete list of ingredients in ILUMYA.

Before receiving ILUMYA, tell your healthcare provider about all of your medical conditions, including if you:

- have any of the conditions or symptoms listed in the **section "What is the most important information I should know about ILUMYA?"**
- have an infection that does not go away or that keeps coming back.
- have TB or have been in close contact with someone with TB.
- recently received or are scheduled to receive a vaccine (immunization). You should avoid receiving live vaccines during treatment with ILUMYA.
- are pregnant or plan to become pregnant. It is not known if ILUMYA can harm your unborn baby.
- are breastfeeding or plan to breastfeed. It is not known if ILUMYA passes into your breast milk.

Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

How will I receive ILUMYA?

- ILUMYA should only be given to you by a healthcare provider.
- ILUMYA is given as an injection under your skin (subcutaneous injection) in areas of your body such as your thighs, stomach area (abdomen), or upper arm.
- If you miss a follow-up appointment and do not receive your dose of ILUMYA, schedule another appointment as soon as possible.

What are the possible side effects of ILUMYA?
ILUMYA may cause serious side effects. See "What is the most important information I should know about ILUMYA?"
The most common side effects of ILUMYA include:

- upper respiratory infections
- injection site reactions
- diarrhea

These are not all of the possible side effects of ILUMYA. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

General information about the safe and effective use of ILUMYA.
Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. You can ask your healthcare provider for information about ILUMYA that is written for health professionals.

What are the ingredients in ILUMYA?
Active ingredient: tildrakizumab-asmn
Inactive ingredients: L-histidine, L-histidine hydrochloride monohydrate, polysorbate 80, sucrose, and Water for Injection, USP.

Manufactured by: Sun Pharma Global FZE, Inc.
Sharjah, U.A.E. U.S. License No. 2092
At: MSD Ireland (Carlow), County Carlow, Ireland
Tildrakizumab-asmn (active ingred.). Product of The Netherlands.
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RX ONLY

usmg-tildrakizumab-pfs-00001

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This Medication Guide has been approved by the U.S. Food and Drug Administration.

Issued: 08/2018

SIP AWAY

Research says that one of the world's favorite drinks has some serious heart-health benefits. We'll drink to that!

BY LAURIE HERR

More reason to love your morning cup of joe: Growing evidence suggests that drinking coffee helps protect the heart, particularly for women. In fact, the more you drink—up to 5 cups a day—the greater the benefits, some research shows. One study recently published in the journal *Circulation* reviewed data from the decades-long Framingham Heart Study, which looks at diet and heart health. The researchers found that, compared with non-coffee drinkers, people who drank coffee had a 7% lower risk of heart failure and an 8% lower risk of stroke. While the study couldn't prove a direct cause-and-effect relationship, it did show a strong link. Caveat: Step away from the cream and sugar. The health perks apply to plain black coffee, not the super-sweet, high-calorie, caramel-drizzled stuff you get at your local coffee shop. And watch the caffeine—too much can make you jittery during the day and wreck your sleep at night.

CHAPTER 2

MEALTIME ANSWERS

Here are the research-driven truths about which food groups raise your heart-disease risks and which foods to pile on to keep in fine cardio health.

14 HEART-HEALTHY FOODS

Research shows that eating a variety of certain foods can lower your risk of heart disease. Here's the science behind the best choices for your heart.

BY LAURIE HERR

Heart disease is the number-one killer of both men and women in the U.S., claiming 1 out of every 4 lives. And while you might think it won't happen to you (you've got great genes, right?), over time, poor eating habits—those venti flavored lattes, desk-side snacks and late-night pizza runs—can lead to high blood pressure, high cholesterol and inflammation, raising your risk for a heart attack and stroke. So do your heart a favor. Swap those old diet choices for the heart-healthy foods here.

1 WHOLE GRAINS

It's no secret that whole grains are a healthier choice than their overly processed, refined-grain cousins. A recent analysis of 45 studies found that eating at least three servings a day of whole grains was linked to a 22% lower risk of heart disease. That's because whole grains are rich in antioxidants, phytoestrogens and phytosterols—all nutrients that protect against heart disease. Plus, they're high in fiber, something crucial for heart health.

2 AVOCADOS

Whizzed up in a smoothie or mashed and spread on toast, avocados are a yummy way to boost your heart health. They're loaded with heart-healthy monounsaturated fats, including oleic acid, the same fat that gives olive oil some of its many perks. But that's not all. Avocados are a rich source of potassium, an essential mineral many people don't get enough of that helps lower blood pressure and the risk of stroke. They're high in vitamins and heart-friendly fiber too. Need more convincing? A 2017 review found that eating avocados may help fight metabolic syndrome, a dangerous cluster of conditions that often leads to heart disease.

3 SALMON AND OTHER FATTY FISH

Eating two or more servings of fish a week is linked to a 30% lower risk of developing coronary heart disease, studies show. Fish—especially oily kinds like salmon and tuna—are rich in omega-3 fats, which reduce levels of triglycerides that can cause heart problems. Omega-3s also help lower blood pressure and can help prevent irregular heart rhythms. Which fish is best? No common fish delivers more omega-3 fatty acids than salmon. Go for wild-caught Alaskan salmon if you can. Compared with most farmed salmon, it's generally lower in calories and pollutants and higher in omega-3s—and it's better for the planet.

4 YOGURT
A 2018 analysis found a surprising link between yogurt and heart health in people with high blood pressure. In the study, researchers looked at data collected over 30 years from more than 55,000 women in the Nurses' Health Study and more than 18,000 men from the Health Professionals Follow-Up Study. They found that those who ate two or more servings of yogurt a week had a roughly 20% lower risk of heart attack or stroke compared with those who ate less. Since yogurt is associated with an overall healthy diet, some participants might have reported more health benefits than the study controlled for.

5 LEAFY GREEN VEGETABLES
Mountains of research studies show that the more fruits and veggies you eat, the lower your risk of heart disease. A 2014 meta-analysis of studies following nearly 470,000 people found that each additional daily serving of fruits and vegetables cut the risk of death by heart disease by an average of 4%. The superstars that contributed the most benefits? Leafy green vegetables. Low in calories but high in fiber, leafy greens like spinach, lettuce, kale and cabbage deliver vitamins and minerals essential for heart health. They're especially high in vitamin K, which is important for proper blood clotting. One surprising recent study in teens suggested that a lack of vitamin K may affect the actual heart structure, leading to a higher risk of heart disease later in life.

6 BEANS
Eating beans regularly is good for your heart, and you don't need to eat a lot of them to benefit. A study published in the *Journal of Nutrition* suggests that having just ½ cup of cooked pinto beans a day may help lower cholesterol, thanks largely to their soluble fiber, plus heart-protective flavonoids—the same kind found in chocolate, berries and red wine—which can help lower your risk for heart attack and stroke.

Of course, you don't have to stick to just pinto beans! Go for a wide variety: black beans, kidney beans, cannellini beans, cranberry beans and fava beans, plus other legumes, such as chickpeas, black-eyed peas, lentils and more.

7 NUTS
Nuts are full of vitamins, minerals and heart-healthy monounsaturated fats and have low levels of saturated fats. Research suggests that people who eat nuts—walnuts, pecans, almonds, hazelnuts, pistachios, pine nuts and peanuts (which are actually legumes)—two to four days or more a week have a lower incidence of heart disease than people who eat them less often. Does it matter what kind? Some researchers say walnuts win the honors. A study from the University of Scranton in Pennsylvania found that walnuts have more high-quality antioxidants than any other variety.

8 DARK CHOCOLATE
Chocolate has gotten a lot of buzz in recent years as a heart-healthy treat. Cocoa is rich in flavonoids, plant nutrients that help repair cell damage. Flavonols—cocoa's main kind of flavonoid—help lower blood pressure, promote proper blood clotting and boost blood flow to the brain and heart. Add to that a hefty helping of minerals, fiber and other powerful antioxidants, and you have one sweet package. And the heart benefits are impressive: in one study of nearly 5,000 people, nibbling on chocolate five or more times a week was associated with a whopping 57% lower risk of heart disease, compared with non-chocolate eaters. (Keep in mind, though, that this was an observational study, so the research didn't prove a cause and effect.) So go ahead—enjoy, but go easy: just 1 or 2 ounces a day does the trick. For the most benefits, choose dark chocolate with at least 70% cocoa solids.

9 TOMATOES
An excellent source of vitamins C and A, plus potassium and fiber, tomatoes are also high in lycopene, which works with other vitamins and minerals to help prevent disease. A 2017 analysis of 25 studies found that people with the highest lycopene intake cut their risk of stroke by 26% and risk of heart disease by 14%. Cooking tomatoes brings out their lycopene, boosting the heart benefits even more.

10 APPLES
Eating apples was associated with a lower risk of death from both coronary heart disease and cardiovascular disease in the Iowa Women's Health Study, which has

been tracking more than 34,000 women for nearly 20 years. And Finnish researchers studying dietary data collected over nearly 30 years from 9,208 men and women also found that frequent apple eaters had the lowest risk of strokes compared with non–apple eaters. What explains the heart-healthy benefits? Researchers say it's the strong antioxidant flavonoid compounds found in apples. These compounds play a key role by stopping inflammation and preventing the buildup of plaque in arteries.

11 BERRIES
In a small Finnish study of 72 middle-aged people, eating just under 1 cup of mixed berries—including strawberries, red raspberries, bilberries (similar to blueberries), lingonberries and other native kinds—each day for eight weeks was associated with higher levels of "good" HDL cholesterol and lower blood pressure. The diverse mix provided a wide range of polyphenols, plant compounds that may increase levels of nitric oxide, which in turn helps relax blood vessels and lower blood pressure.

No bilberries where you live? Not to fear. Fresh or frozen, easy-to-find varieties like cranberries, strawberries and blueberries all deliver heart-healthy antioxidants.

12 POMEGRANATES
Studies show that the ruby-red fruit may help reduce the buildup of plaque in arteries and lower blood pressure. Experts believe that the benefits come from pomegranates' powerful punch of polyphenols, including anthocyanins (found in blue, purple and deep-red foods) and tannins.

13 OLIVE OIL
It's been a diet staple in Mediterranean countries—where people tend to live longer—for thousands of years. And for good reason: not only is olive oil excellent for cooking, but it also delivers powerful heart-healthy benefits. Stacks of studies confirm that extra-virgin olive oil in particular helps lower blood pressure and cholesterol and prevents blood clots. It also fights inflammation: researchers have found that oleocanthal, a compound in virgin olive oil, has anti-inflammatory properties similar to ibuprofen. Rich in monounsaturated fats and antioxidants, olive oil has another plus: studies show it can help you stick to a healthy weight, which can further slash your risk of heart disease. The bottom line: if olive oil isn't a staple in your pantry yet, it should be.

14 GREEN TEA
Sipping an afternoon cup of green tea may be an easy way to help your heart. That's because green tea has catechins, powerful antioxidants that, over time, can significantly reduce levels of LDL cholesterol and triglycerides. Drinking a lot of green tea could add years to your life. An 11-year study that followed 40,530 Japanese adults found that those who drank 5 cups of green tea a day had a 26% lower risk of heart disease and a 16% lower risk of death from all causes, compared with those who drank less than 1 cup a day. ●

SHAKING OUT THE TRUTH ON SALT

Salty foods are hard to resist, and a steady diet of them can raise your risk of high blood pressure. But do we all need to go low-sodium? Here is the latest thinking and simple how-to advice for enjoying the mineral in moderation.

BY LISA LOMBARDI

Always craving something salty? A heaping plate of french fries, maybe, or a saucy bowl of Asian takeout? You're not the only one: Americans eat more than 3,000 mg of sodium a day—that's beyond the U.S. government's recommendation of 2,300 mg.

First, know that a few fries here and there never hurt anyone. But a whole heaping plate of them meal after meal may increase your chances of developing cardiovascular disease. "It's important to watch your sodium intake because high sodium increases blood pressure and high blood pressure increases your risk for heart attack, stroke, dementia, and kidney and eye disease," says Nieca Goldberg, M.D., medical director of the Joan H. Tisch Center for Women's Health at the NYU Langone Medical Center in New York City. In fact, according to the American Heart Association, if Americans cut their salt consumption to 1,500 mg of sodium a day, deaths from cardiovascular disease would decrease by 500,000 to nearly 1.2 million (or about 8% to 20%) over the next decade. It's an important public-health goal given that nearly 50% of American adults have cardiovascular disease, according to the AHA.

At the same time, the relationship between salt and our health is complex. Some of us are genetically prone to being salt-sensitive, while other people may not need to go low-sodium. There's also some confusion about the current guidelines and how to best get to those levels.

The Fault with Salt

While salt gets a bad rap, it is actually an essential mineral. Your body needs it to handle basic

functions, such as conducting nerve impulses and balancing water and minerals.

However, get too much salt and it can start to tax your system. "Water is attracted to sodium like a magnet, so an excess of sodium means more fluid is retained in the body," explains Cynthia Sass, R.D., a performance nutritionist based in Los Angeles. And water retention can do more than leave you feeling bloated. "It puts stress on and reduces the flexibility of our blood vessels, leading to high blood pressure," explains Goldberg. And that can harm your heart, brain, arteries and kidneys.

So how much salt is too much? This is where things start to get murky. There is conflicting research, as well as differing guidelines from major health organizations. The Department of Health and Human Services' Dietary Guidelines for Americans recommends 2,300 mg or less a day for healthy adults (keep in mind that 1 teaspoon of table salt packs 2,325 mg of sodium). The AHA, meanwhile, recommends an ideal goal of 1,500 mg for adults, while noting that healthy people who are at 2,300 mg or less might not need to reduce their sodium beyond that level.

"Most people don't understand that when it comes to salt, there is no one-size-fits-all, since people vary in their response to salt."

The AHA's stringent guidelines are based on multiple studies showing both that a high-sodium diet is linked to high blood pressure and that reducing sodium intake helps reduce blood pressure. A 2017 study in *Hypertension* assigned adults to either a regular American diet or the DASH diet, which emphasizes low animal fat, plenty of fruits and vegetables and low sodium. In one week, the people in the DASH group saw their systolic blood pressure drop four points and their diastolic pressure go down one point. A 2017 study published in *Circulation* measured sodium levels in urine and found a strong direct relationship between high sodium and high blood pressure in both men and women.

But some studies have reached opposite conclusions. A 2014 study conducted in France found no link between salt in the diet and systolic blood pressure in men and women. A different study suggested that reducing sodium can sometimes raise blood pressure: the 2017 study, published in the *FASEB Journal* (published by the Federation of American Societies in Experimental Biology), used data from the long-term Framingham Offspring Study, following people for 16 years. The researchers found that the participants who had gotten below 2,300 mg of daily sodium had higher blood pressure than those who had consumed more.

"Most people don't understand that when it comes to salt, there is no one-size-fits-all, since people vary in their response to salt," says Osama Hamdy, M.D., an associate professor at Harvard Medical School and medical director of the Obesity Clinical Program at Joslin Diabetes Center in Boston. "Fifteen percent of people get high blood pressure on a low-salt diet."

About 25% of the U.S. population are salt-sensitive, Hamdy continues, which makes them at risk of hypertension and stroke, while others are not at the same high risk. Researchers have identified a genetic marker associated with salt sensitivity, he explains, and certain groups, such as African Americans, are more likely to have it.

Experts agree that a few groups need to be especially vigilant about how much sodium they get. "Women, older people, African Americans and people with diabetes, kidney disease or heart failure get the most benefit from a low-sodium diet," Goldberg says. In fact, new research indicates that it's important that people with diabetes limit their salt intake, Hamdy adds. "There is a small randomized control trial from the U.K. that showed that a modest reduction in salt intake, to approximately the amount recommended in public-health guidelines, leads to significant drops in BP in individuals with type 2 diabetes and prediabetes with normal or mildly raised BP."

The Surprising Culprits

Overall, though, most of us could stand to ease up on salt a little. You might think that the best way to cut down is to hide the saltshaker. But that's not the real problem and solution, says Sass. "More than 70% of the sodium Americans consume is from processed foods," she says. If you salt your food and sprinkle on 1/16 teaspoon, that's only 145 mg of sodium, while

+
CHOOSE LEAN PROTEINS, SUCH AS CHICKEN AND FISH, THAT ARE GRILLED OR STEAMED FOR SODIUM-FRIENDLY TAKEOUT.

THE HIGH POTASSIUM CONTENT IN SWEET POTATOES IS GREAT FOR REGULATING MUSCLE CONTRACTIONS AND MAINTAINING A HEALTHY BLOOD PRESSURE.

1 serving of canned soup can pack nearly 700 mg. "Eating fresh food and salting it a little bit after cooking is actually one of the best ways to rein in your sodium intake," she says. This is a great strategy for reducing sodium consumption, Sass adds, because many of us are in the habit of automatically salting food during cooking. "But if you wait and taste the food first, you may find that you need much less salt than you typically use, especially if you're ramping up your use of herbs and spices."

Sprinkle on a dash of whatever type you like: kosher salt, sea salt and table salt—a combination of the minerals sodium and chloride. "Kosher salt contains slightly less sodium per teaspoon than other types because of the larger granules and spaces in between, but all ground salts contain roughly the same sodium content," Sass says. Sea salt also contains less sodium, and it's a less-processed alternative.

Beyond packaged foods, another big culprit is our takeout addiction. "Restaurant and takeout meals are notorious sodium bombs," Sass says. And we greatly underestimate how much sodium we're getting from our restaurant meals, according to a study published in the journal *Appetite*. In the study, researchers asked people coming out of fast-food restaurants how much sodium they thought they had consumed. The fast-food patrons were getting six times as much as they thought.

If you eat out a lot, you can cut sodium simply by cutting your portions: box up half to go and, bonus, you won't feel bloated from salt in the morning. Another trick is to ask for sauces on the side and use half or less, says Sass. Or make your own. Sass likes to order a steamed Chinese dish and whip up her own simple sauce: thin almond butter with a little low-sodium veggie broth and whisk with grated fresh ginger, minced garlic and crushed red pepper.

Another good rule of thumb with takeout: the less-processed the better. "Opt for a bowl with lots of veggies, beans and guac over a burrito or quesadilla made with a processed tortilla," Sass advises.

Read Those Labels

When grocery shopping, the AHA recommends you avoid "the salty six"—a half-dozen categories of foods that pack a ton of sodium. These offenders: pizza, soup, cold cuts and cured meats, sandwiches, poultry, and breads and rolls.

Breads and rolls? Yes, really. "We don't generally think of bread as salty, but just one slice of bread can contain up to 230 mg of sodium," Sass says. "Two slices plus deli meat and cheese, and you can easily rack up over 1,000 mg in one meal." Other less-expected sources include salad dressings, condiments, frozen meals, pizza, mixes, sauces, sweet treats, such as instant pudding, and even cereal.

By law, companies have to list sodium. A food with less than 140 mg is considered low sodium, according to the AHA. Be sure to check the serving size, too, because small snack-size portions sometimes contain multiple servings, meaning you might be getting more sodium than you think.

While it's hard to completely eliminate processed foods, we'd all be wise to eat as much whole, unprocessed or minimally processed food as possible, Sass says. Not only does this help us have a more moderate amount of sodium, but it also ensures we get a healthy mix of nutrients. "Swapping processed foods for whole, fresh foods requires no math," she points out. For example, a breakfast of veggies lightly sautéed in extra-virgin olive oil with an egg and a side of fresh fruit offers much more nutritional value and far less sodium than a breakfast sandwich.

"Opt for a bowl with lots of veggies, beans and guac over a burrito or quesadilla made with a processed tortilla."

But let's face it: no matter how careful you are, there are bound to be days when you overdo it and can almost feel the salt oozing out of your pores. No need to beat yourself up—there are three moves that will get you back on track. "Get back to whole, unprocessed foods; eat potassium-rich foods; and drink plenty of water," Sass advises. Drinking more water will help your kidneys flush out excess sodium and fluid. Potassium, meanwhile, counters the effects of sodium on the body and helps your kidneys sweep away excess sodium and fluid. Potassium-rich picks include oven-roasted skin-on potatoes and sweet potatoes, bananas, spinach and avocados.

Yes, you read that correctly: You're being prescribed a bowl of fresh guac. Just mind the salted chips. ●

HOW BAD IS FAT FOR YOUR HEART, REALLY?

Like all supposed villains, fat is complicated. And perhaps not really such a bad guy after all. Here's what you need to know.

BY HOLLY PEVZNER

Since the 1970s, fat has been the bad guy of heart health. It's just so easy to look at that congealed mess of bacon fat in the breakfast pan and picture it slowly slogging through your arteries, clogging everything up along the way. It totally makes sense. It makes so much sense that back in the 1980s, the U.S. surgeon general demanded that reducing our collective fat consumption should be the nation's "primary dietary priority." Then in the 1990s, the now-defunct food pyramid mirrored that warning and instructed us all to limit our fat intake across the board. The reason: excess fat was thought to be the key dietary factor leading to coronary heart disease, a belief that ricocheted through the snack aisle, the dairy aisle and every aisle in between, creating a bastion of low-fat and fat-free everything. So after decades of shunning fat, you'd think that our heart health would be better than ever by now. The reality: heart disease is still holding on strong as the leading cause of death for both men and women in the United States, claiming the lives of about 600,000 people each year. But why?

Fat never totally disappeared. But back in the low- to no-fat heyday of the '80s and '90s, it was painstakingly extracted from packaged cookies, crackers, yogurts and so many other nonfresh foods that peppered the grocery store. It turned out, however, that sugar and refined carbohydrates were often the go-to fat substitutes. "Food companies had to do something to make all of these fat-free and low-fat foods taste good, so they added sugar. A lot of sugar," notes Monique Tello, M.D., a clinical instructor at Harvard Medical School and the author of *Healthy Habits for Your Heart*.

FOODS MADE UP OF HEART-HEALTHY FATS, SUCH AS CANOLA OIL AND SUNFLOWER OIL, ARE LIQUID AT ROOM TEMPERATURE.

"And, lo and behold, people who ate these low-fat but high-sugar foods still got heart disease." The same held true for those who went the refined-carb route. In fact, these fat-for-sugar and fat-for-carbs switches had a negligible effect on the ratio of bad-to-good cholesterol and in consequence had no impact on one's risk of coronary heart disease, according to the American Heart Association. Does that mean that fat is now totally fine for the heart? Not exactly.

Which Fat Is Which?

Fat does way more than potentially clog your arteries. Fat is an energy source. It cranks out hormones that help the body function. "Fat also supports the cells of the body, as well as the sheaths surrounding nerves," says Tello. "And they make it so we are able to absorb certain nutrients, especially the fat-soluble vitamins A, D, E and K." Not all fats are the same, however. We've got saturated and trans fats (the traditional bad guys) and two types of "good" unsaturated fats: monounsaturated and polyunsaturated. They all have a very similar chemical structure, but what makes some fats possibly bad for your heart and others good comes down to their molecules, or fatty acids, and how they're linked.

Saturated fatty acids are packed together super tightly. As such, they're solid at room temperature. When these rigidly linked fats enter the bloodstream, they can increase levels of low-density lipoprotein (LDL or "bad") cholesterol. Saturated fat is found in red meat, whole-milk dairy foods, coconut oil and tons and tons of processed and prepared snacks and baked goodies. And it was considered the top bad fat for a long time, until trans fat took the lead.

Trans fats are also full of tight bonds, but unlike saturated fats, most trans fats are not found in nature. Instead, they're made when food manufacturers alter the chemical structure of unsaturated fats, creating a man-made fat that's more solid at room temperature and lasts a long time on store shelves. Trans fats increase bad cholesterol and decrease

high-density lipoprotein (HDL or "good") cholesterol and were once ever-present in anything fried or battered, and in packaged desserts, as well as in stick margarine and shortening.

Then there are the unsaturated "good" fats (monounsaturated and polyunsaturated) that are made of looser bonds that bend, making them liquid at room temperature. Unsaturated fats don't up "bad" cholesterol. Instead, they work to increase "good" cholesterol, which helps usher "bad" cholesterol to the liver, where it can be broken down and removed from the body. The good stuff is found in such foods as fish, nuts, soybeans, avocados, certain plant oils, seeds and more.

The Worst Fat for Your Heart

Today it's universally agreed that all man-made trans fats are terrible for your heart and overall health. You can find these fats in the likes of fried foods, baked goods, crackers, potato chips, stick margarine and more. "It's been repeatedly shown that trans fats raise LDL and triglyceride levels, which are the bad cholesterols. They lower HDL levels, which is the good cholesterol. Plus, trans fats promote plaque formation along the blood-vessel walls and increase inflammation," says cardiologist Nisha Jhalani, M.D., director of inpatient clinical services for the Center for Interventional Vascular Therapy at New York Presbyterian–Columbia University Irving Medical Center. (Inflammation has been shown to damage blood vessels and lead to heart disease and stroke.) It's estimated that consuming trans fats may be responsible for up to 100,000 premature coronary deaths each year. Moreover, removing trans fats from our diets will likely prevent 1 in 5 heart attacks and related deaths, according to research in the *New England Journal of Medicine*.

Good thing that sidestepping trans fats is far easier today than even just a few years ago. In 2015, the Food and Drug Administration ruled that artificial trans fats were unsafe, and three years later, they were finally (almost) banned in the United States. The positive impact on heart health has already started to kick in: a 2017 report in *JAMA Cardiology* noted that an earlier ban on trans fat just in New York State restaurants yielded a drop in heart attacks and strokes. Specifically, researchers found 6.2% fewer hospital admissions for cardiovascular events, including almost 8% fewer admissions for heart attacks.

"Food manufacturers can still list 0 grams of trans fat on food labels as long as the product has less than 0.5 gram per serving," says Kathy McManus, R.D., L.D.N., C.D.E., the director of nutrition at Brigham and Women's Hospital in Boston. (To know if your food has undocumented trans fats, look for partially hydrogenated vegetable oil on the label. If that's there, so are trans fats.) At the same time, restaurants fry food in vegetable oil, which often contains trans fats. "Not only can high cooking temperatures increase the amount of trans fat present, so can reusing the fry oil, which happens all of the time at restaurants," says McManus. In short: trans fats are still out there, but for the most part, they're pretty much out of the day-to-day food supply, which leaves the other "bad" guy: saturated fat.

Fat does way more than potentially clog your arteries. Fat is an energy source. It cranks out hormones that help the body function.

"Saturated fat acts directly on the way our body processes cholesterol," says integrative cardiologist Kimberly Parks, D.O., medical director of Synergy Private Health and an assistant professor of medicine at Harvard Medical School. (Saturated fat, remember, is found in red meat, whole-milk dairy foods, processed foods and more.) "When we eat a meal high in saturated fat, the fat signals our cells to begin manufacturing LDL, or the 'bad' cholesterol." As it turns out, our total LDL is made of various particle sizes, and the smaller the particles, the more likely that they'll eventually lead to atherosclerosis, or plaque buildup inside the arteries. "Saturated fat signals the body to make more of these smaller-density particles," says Parks.

Even with all the above being true, "there's still mixed evidence over just how harmful saturated fats can be for the heart," says Jhalani. Of note: a 2014 meta-analysis in the journal *Annals of Internal Medicine* found that there was no evidence to support the idea that saturated fat increases one's risk of heart disease. A 2016 *PLoS One*

study suggested that there was a relatively small or neutral association between butter consumption and cardiovascular disease. Then there was a report in the *Annals of Internal Medicine*, this one in 2019, that boldly stated that there was no compelling evidence to show that reducing one's intake of saturated-fat-filled red meat is beneficial to one's health. In fact, according to a review in the journal *Nutrients*, it's now clear that saturated fat's role in spurring coronary heart disease has been "much exaggerated."

Exaggerated? Yes. Good for your heart? No. "It's still absolutely true that too much saturated fat is not good for your health," says McManus. "The problem is, when we focus on just one nutrient, like saturated fat, we wind up missing the whole dietary picture." The truth is that "saturated fats, when eaten within the recommended less than 6% of one's daily caloric intake, may not necessarily lead to detrimental heart effects," says Jhalani. It all depends on who's doing the eating, what their risk factors are and what else they're dining on. "A young person with no cardiac risk factors, for instance, can eat butter and have red meat on occasion without thinking twice," says Jhalani. But if someone has cardiovascular disease or known risk factors, that's a different story. And even for them, "if they were to go ahead and vastly reduce their saturated-fat intake, but that's it, it wouldn't be enough to keep their heart healthy," says McManus. And that's where the good fats—polyunsaturated (PUFA) and monounsaturated (MUFA) fatty acids—come into play.

Opting for extra-virgin olive oil instead of butter is an effective approach to tempering the effects of various cardiovascular risk factors.

The Fat All-Stars

"Incorporating healthy fats into your daily diet plan is key to heart health," says McManus. You'll find MUFAs in foods like olive, canola and sesame oils; avocados; peanut butter; and many nuts and seeds. For foods rich in PUFAs, look for items like soybean, corn and sunflower oils; walnuts; sunflower seeds; tofu and soybeans; flax; and salmon. Both MUFAs and PUFAs help reduce bad cholesterol levels, which can lower risk of heart disease and stroke. And PUFAs are essential fats, meaning they're needed for normal everyday bodily functions, like blood clotting. Plus, PUFAs improve one's overall cholesterol profile and lower triglycerides, which are a type of fat found in blood that, when elevated, likely ups one's risk of heart disease.

And when these fats take the place of saturated fats, well, that's when the heart benefits really start rolling in. For instance, a 2015 report in the *Journal of the American College of Cardiology* noted that substituting saturated fats for MUFAs can yield a 15% reduction in coronary heart disease. At the same time, a 2017 report in the journal *Circulation* noted that lowering saturated fat and replacing it with polyunsaturated vegetable oil reduced cardiovascular disease by about 30%, similar to the reduction achieved by statins. "The effect of exchanging saturated fats for polyunsaturated fats is powerful," says Parks. "PUFAs not only lower bad cholesterol, they increase its turnover, which allows the body to more readily process LDL, or 'good,' cholesterol."

How to Flip the Fat in Your Diet

There's no real need to obsess over every bit of fat that you eat. "The research hasn't really supported the idea that there should be a cap on the total amount of fat consumed," says McManus. (And, yes, that goes for keto and Atkins followers too.) While there are guidelines on saturated fat (no more than 6% of daily calories should come from saturated fat, or 20 grams in a 2,000-calorie diet), they're always a bit of a head-scratcher. "Those percentages mean nothing to people!" says McManus. "Instead, I suggest looking at the types of fat you're eating now and reducing those that are higher in unhealthy fats and substitute them for healthy fats."

To start making changes, McManus suggests surveying what you use to cook with. Are you opting for butter or shortening? What about coconut or palm oil? If so, consider replacing these with an unsaturated healthy fat. "Peanut, olive, canola, sunflower oil—they're all heart-healthy choices," says McManus. Moreover, opting for extra-virgin olive oil is considered a simple but effective approach to tempering the harmful

WORK TWO SERVINGS OF LOW-FAT OR FULL-FAT DAIRY INTO YOUR DAILY DIET, BUT STICK TO PLAIN VERSIONS INSTEAD OF SUGAR-LOADED FLAVORED VARIETIES.

effects of various cardiovascular risk factors, such as oxidative stress and inflammation, concluded a 2018 study in the journal *Endocrine, Metabolic & Immune Disorders—Drug Targets*.

Next up: snacks and treats. Trade some of your less-than-healthy snacks for nuts, which are chockfull of unsaturated fat, says McManus. (Aim for ¼ cup a day.) Eating walnuts at least once a week, for instance, is associated with a 19% lower risk of cardiovascular disease and a 21% lower risk of coronary heart disease, noted a 2017 study in the *Journal of the American College of Cardiology*. The same study found that people who ate peanuts, cashews, almonds or other tree nuts two or more times a week had up to 15% lower risk of cardiovascular disease and up to 23% lower risk of coronary heart disease, compared with those who shunned nuts. (Also great-for-your-heart snacks, swaps and add-ins: olives and avocados.)

Despite what the seemingly pro-meat *Annals of Internal Medicine* study reported, it's important to note that researchers never actually touted eating red meat. And Jhalani, Tello, McManus, Parks and the American Heart Association all agree that, in excess, red meat is harmful and that limiting it is best for heart health. McManus would love it if people would shoot for red meat as a once-a-week thing and start thinking of it as a side dish instead of a main. "But if you are someone who eats red meat every day, I'd begin by aiming for a little less day by day."

One of the best ways to make eating less meat

5 REASONS CHEESE IS ACTUALLY GOOD FOR YOUR HEALTH

It's the research we've all been waiting for: five amazing health benefits of cheese, according to science.

BY RACHAEL MOELLER GORMAN

Say what? Cheese might actually be good for you? Old-school thinking is that cheese is unhealthy, in large part because of all its saturated fat. But research in recent years has questioned the link between saturated fat and heart disease. In fact, eating cheese (nibbling, not gorging) is linked with numerous health benefits. Here are five health benefits of cheese.

1. CUTS YOUR RISK FOR HEART DISEASE

Some researchers think cheese might explain the so-called French paradox—that French people have low rates of heart disease despite their affinity for cheese and other foods rich in saturated fat, such as butter and duck. Then there's a 2016 report that analyzed results from 31 prospective cohort studies (the ones that watch people throughout their lives) that compared how much dairy people ate to whether they developed cardiovascular disease. One major finding was that eating nearly 2 ounces of cheese daily (1 ounce equals a 1-inch

even more heart-healthy is to replace that burger or steak with fish, particularly ones that are high in polyunsaturated fats containing omega-3 fatty acids—such as salmon, mackerel, tuna and sardines. "Omega-3 fatty acids raise HDL cholesterol. Plus, they act as an anti-inflammatory, which is great for heart health," says Tello. As such, the American Heart Association recommends that folks consume two 3.5-ounce servings a week of nonfried seafood (favoring omega-3-rich options) for cardiovascular benefits, including a reduced risk of cardiac death, coronary heart disease and stroke. And when you aren't eating fish, be sure to enjoy other sources of omega-3s, like walnuts, ground flaxseed and soybeans.

Doing all of this swapping and shifting has been proven to buoy heart health. But the thing is, "nutrition has lots of complexities and variables," says McManus. "It's not just about cutting something out or adding something in. It's about balance." Too much salt, too much sugar, not enough fiber or fruits or veggies, too much packaged, processed and fried food—it all matters. To wit: a 2017 report in the *Annals of Nutrition & Metabolism* found that consuming a largely plant-based diet that's rich in colorful fruits and veggies, along with healthy unsaturated fats, is associated with a markedly lower risk of heart disease. "It's true," says Jhalani. "An overall healthy diet—plus regular physical exercise—is extremely important in the prevention of heart disease." Don't get so focused on one aspect that you forget about the rest. ●

cube) was associated with an 18% lower risk of heart disease. Writing in the *British Journal of Nutrition*, the authors proposed that minerals like calcium, potassium and magnesium and vitamins like riboflavin and B_{12} may play a role. Another key finding: eating as little as ½ ounce of cheese a day could cut stroke risk by 13%.

2. FENDS OFF DIABETES

Eating 1¾ ounces of cheese a day may lower your risk of developing type 2 diabetes by 8%, says an analysis of cohort studies in the *American Journal of Clinical Nutrition*. There's more good news from the same study: people who ate about ¾ cup of yogurt daily had an even lower risk. Another study in *AJCN*, this one out of Sweden, found that women who ate just under 2 ounces of cheese also lowered their type-2 diabetes risk. The shorter-chain saturated fats in cheese were linked to a lower risk of type 2 diabetes. Also, calcium, which increases insulin secretion and may reduce insulin resistance, may fend off the disease, say researchers. Whey proteins might play a role, too, since they may increase insulin sensitivity.

3. HELPS YOU DODGE DEATH

OK, that's extreme. But eating cheese really might help you live longer, according to a 2016 study in the *European Journal of Clinical Nutrition* that followed 960 French men for almost 15 years to see whether the foods they ate had any relationship to when they died. The happy finding? Eating about 2 ounces of cheese a day was associated with a 38% lower likelihood that they died during the study. Perhaps calcium's blood-pressure-lowering effects play a role or maybe it was cheese's ability to curb fat absorption in the gut, write the researchers.

4. IMPROVES YOUR CHOLESTEROL

Keeping with heart health, a daily snack of cheese may lower your cholesterol. A 2015 analysis of randomized controlled trials (the gold standard in research) in *Nutrition Reviews* compared the blood cholesterol of people eating a prescribed diet that included butter or cheese. Although both diets had about the same amount of saturated fat and calories, the cheese eaters ended their trials with lower total and LDL cholesterol than their butter-eating counterparts. Their "good" HDL cholesterol was also lower, though, which is the opposite of what you want. The cholesterol changes could be due to calcium's ability to ferry fat through your gut so you don't absorb it and its associated calories (the amount of calcium is much greater in cheese than in butter). Vitamin K_2, found in fermented dairy products like cheese, may also play a role.

5. MAKES YOU STRONGER

Eating almost a cup of ricotta cheese a day for 12 weeks boosted muscle mass and improved balance in healthy adults over age 60. The researchers of the study, published in 2014 in *Clinical Interventions in Aging*, said that the milk proteins casein and whey may have fueled the improvement. ●

MEAL PLAN

7 DAYS OF HEART-HEALTHY EATING

Keep your heart healthy and lose weight with this delicious 1,500-calorie meal plan.

MEAL PLAN BY VICTORIA SEAVER, M.S., R.D.

DAY 1

Breakfast

332 CALORIES

Avocado Egg Toast

- ¼ avocado
- ¼ teaspoon ground pepper
- ⅛ teaspoon garlic powder
- 1 slice whole-wheat bread, toasted
- 1 large egg, fried
- 1 teaspoon Sriracha (optional)
- 1 tablespoon sliced scallion (optional)

1. Combine avocado, pepper and garlic powder in a small bowl and gently mash.
2. Top toast with the avocado mixture and fried egg. Garnish with Sriracha and scallion, if desired.

SERVE WITH

- 1 medium orange

A.M. Snack

217 CALORIES

- 1 cup blueberries
- 1 cup nonfat plain Greek yogurt

Lunch

574 CALORIES

Green Salad with Pita Bread & Hummus

- 2 cups mixed salad greens
- ½ cup sliced cucumber
- 2 tablespoons grated carrot
- 1½ teaspoons extra-virgin olive oil
- 1½ teaspoons balsamic vinegar
- Pinch of salt
- Pinch of ground pepper
- 1 6½-inch whole-wheat pita bread, toasted
- ¼ cup hummus

Arrange greens, cucumber and carrot on a large plate. Drizzle with oil and vinegar. Sprinkle with salt and pepper. Serve with pita and hummus.

P.M. Snack

101 CALORIES

- 1 medium pear

GREEN PEPPERCORNS COME FROM THE SAME PLANT AS BLACK ONES BUT ARE HARVESTED BEFORE THEY MATURE.

Dinner

SERVES 4: 466 CALORIES EACH

Seared Salmon with Green Peppercorn Sauce

- 1¼ pounds wild salmon fillet, skinned and cut into 4 portions
- ¼ teaspoon plus a pinch of salt, divided
- 2 teaspoons canola oil
- ¼ cup lemon juice
- 4 teaspoons unsalted butter, cut into small pieces
- 1 teaspoon green peppercorns in vinegar, rinsed and crushed

Sprinkle salmon pieces with ¼ teaspoon salt. Heat oil in a large nonstick skillet over medium-high heat. Add the salmon and cook until just opaque in the center, gently turning halfway, 4 to 7 minutes total. Divide among 4 plates. Remove the pan from the heat and immediately add lemon juice, butter, peppercorns and the remaining pinch of salt; swirl the pan carefully to incorporate the butter into the sauce. Top each portion of fish with sauce (about 2 teaspoons each).

SERVE WITH

- 1 cup steamed green beans
- 1 baked medium red potato, drizzled with 1 teaspoon olive oil, 2 tablespoons nonfat plain Greek yogurt and a pinch of pepper

DAILY TOTALS: CAL 1,490 / **FAT** 51G (SAT 11G) / **CARBS** 185G / **PROTEIN** 88G / **FIBER** 35G / **SODIUM** 1,384MG

+ TRY OTHER VEGGIES, LIKE SUGAR SNAP PEAS OR CARROTS. FOR ADDED CRUNCH, TOP IT OFF WITH CHOPPED ROASTED PEANUTS.

DAY 2

Breakfast

338 CALORIES

- 1 cup bran cereal
- 1 cup skim milk
- 1 cup blueberries

A.M. Snack

200 CALORIES

- 1 medium apple
- 1 tablespoon peanut butter

Lunch

387 CALORIES

Veggie-Hummus Sandwich

2 slices whole-grain bread
3 tablespoons hummus
¼ avocado, mashed
½ cup mixed salad greens
¼ medium red bell pepper, sliced
¼ cup sliced cucumber
¼ cup shredded carrot

Spread one slice of bread with hummus and the other with avocado. Fill the sandwich with greens, bell pepper, cucumber and carrot. Slice in half and serve.

SERVE WITH

- 1 medium orange

P.M. Snack

121 CALORIES

- ¾ medium red bell pepper, sliced
- ¼ cup hummus

Dinner

SERVES 3; 426 CALORIES EACH

Roasted Tofu & Peanut Noodle Salad

¼ cup lime juice
¼ cup reduced-sodium soy sauce
1 tablespoon canola oil
1 14- to 16-ounce package extra-firm water-packed tofu, cut into ½-inch cubes
6 ounces whole-wheat spaghetti
½ cup smooth natural peanut butter
3 tablespoons water
3 cloves garlic, minced
1 tablespoon minced fresh ginger
6 cups thinly sliced napa cabbage
1 medium orange bell pepper, thinly sliced
1 cup thinly sliced trimmed snow peas

1. Position rack in lower third of oven; preheat to 450°F. Coat a large baking sheet with cooking spray. Put a large pot of water on to boil for spaghetti.

2. Combine lime juice, soy sauce and oil in a large bowl. Stir in tofu; marinate, stirring frequently, for 10 minutes.

3. Using a slotted spoon, transfer the tofu to the prepared baking sheet; reserve the marinade. Roast the tofu, stirring once halfway through, until golden brown, 16 to 18 minutes.

4. Meanwhile, cook spaghetti according to package directions. Drain.

5. Whisk peanut butter, 3 tablespoons water, garlic and ginger into the reserved marinade. Add the spaghetti, cabbage, bell pepper and snow peas; toss to coat. Top with the tofu.

DAILY TOTALS: CAL 1,472 / **FAT** 54G (SAT 8G) / **CARBS** 217G / **PROTEIN** 62G / **FIBER** 56G / **SODIUM** 1,496MG

DAY 3

Breakfast
338 CALORIES

- 1 cup nonfat plain Greek yogurt
- 1 cup blueberries
- 2 tablespoons slivered almonds
- 2 teaspoons honey

Top yogurt with blueberries, almonds and honey.

A.M. Snack
102 CALORIES

- 2 medium carrots
- 2 tablespoons hummus

Lunch
425 CALORIES

- 2 cups Roasted Tofu & Peanut Noodle Salad (opposite)

P.M. Snack
101 CALORIES

- 1 medium pear

Dinner
SERVES 4: 88 CALORIES EACH

Grilled Romaine with Avocado-Lime Dressing

½ ripe avocado
5 tablespoons buttermilk
2 tablespoons lime juice
1 tablespoon extra-virgin olive oil
½ teaspoon ground cumin
½ teaspoon salt
3 romaine hearts (3–4 ounces each)
1 cup sliced cherry tomatoes
Freshly ground pepper to taste

1. Preheat grill to medium-high.
2. Puree avocado, buttermilk, lime juice, oil, cumin and salt in a food processor or blender until smooth.
3. Oil the grill rack. Cut romaine hearts in half lengthwise, leaving root ends intact. Grill the romaine, cut-side down, until lightly charred, 2 to 3 minutes. Serve topped with the dressing, tomatoes and pepper.

SERVES 4: 127 CALORIES EACH

Paprika-Herb Rubbed Chicken

1 tablespoon herbes de Provence
2 teaspoons paprika
½ teaspoon kosher salt
¼ teaspoon ground pepper
1–1¼ pounds boneless, skinless chicken breast

1. Combine herbes de Provence, paprika, salt and pepper in a small bowl.
2. Coat both sides of chicken with the rub up to 30 minutes before grilling or broiling.
3. Preheat grill to medium-high or position a rack in upper third of oven and preheat broiler.
4. TO GRILL: Oil the grill rack. Grill the chicken, turning once, until an instant-read thermometer inserted into the thickest part registers 165°F, 4 to 8 minutes per side.
TO BROIL: Line a broiler pan (or baking sheet) with foil and coat with cooking spray. Place the chicken on the foil. Broil, watching carefully and turning at least once, until an instant-read thermometer inserted into the thickest part registers 165°F, 10 to 15 minutes.

SERVE WITH

- 1 cup cooked quinoa tossed with 1 tablespoon olive oil and a pinch of salt per person

DAILY TOTALS: CAL 1,512 / **FAT** 59G (SAT 8G) / **CARBS** 173G / **PROTEIN** 85G / **FIBER** 32G / **SODIUM** 1,397MG

DAY 4

Breakfast

[illegible] CALORIES

- ½ cup rolled oats, cooked in 1 cup milk
- 1 cup sliced strawberries

Cook oats and top with strawberries and a pinch of cinnamon.

A.M. Snack

[illegible] CALORIES

- ½ bell pepper, sliced
- 1 medium carrot, cut into sticks
- ¼ cup hummus

Lunch

[illegible] 2; 412 CALORIES EACH (INCLUDING ORANGE)

Loaded Black Bean Nacho Soup

- 1 18-ounce carton low-sodium black bean soup
- ¼ teaspoon smoked paprika
- ½ teaspoon lime juice
- ½ cup halved grape tomatoes
- ½ cup shredded cabbage or slaw mix
- 2 tablespoons crumbled cotija cheese or other Mexican-style shredded cheese
- ½ medium avocado, diced
- 2 ounces baked tortilla chips

1. Pour soup into a small saucepan and stir in paprika. Heat according to package directions. Stir in lime juice.
2. Divide the soup between 2 bowls and top with tomatoes, cabbage (or slaw), cheese and avocado. Serve with tortilla chips.

[illegible] WITH

- 1 medium orange each

P.M. Snack

217 CALORIES

- 1 cup blueberries
- 1 cup nonfat plain Greek yogurt

Dinner

[illegible] 4; 294 CALORIES EACH

Chicken Cauliflower Fried "Rice"

- 1 teaspoon peanut oil plus 2 tablespoons, divided
- 2 large eggs, beaten
- 3 scallions, thinly sliced, whites and greens separated
- 1 tablespoon grated fresh ginger
- 1 tablespoon minced garlic
- 1 pound boneless, skinless chicken thighs, trimmed and cut into ½-inch pieces
- ½ cup diced red bell pepper
- 1 cup snow peas, trimmed and halved
- 4 cups cauliflower rice
- 3 tablespoons reduced-sodium tamari or soy sauce
- 1 teaspoon sesame oil (optional)

1. Heat 1 teaspoon oil in a large flat-bottomed carbon-steel wok or large heavy skillet over high heat. Add eggs and cook, without stirring, until fully cooked on one side, about 30 seconds. Flip and cook until just cooked through, about 15 seconds. Transfer to a cutting board and cut into ½-inch pieces.
2. Add 1 tablespoon oil to the pan along with scallion whites, ginger and garlic; cook, stirring, until the scallions have softened, about 30 seconds. Add chicken and cook, stirring, for 1 minute. Add bell pepper and snow peas; cook, stirring, until just tender, 2 to 4 minutes. Transfer everything to a large plate.
3. Add the remaining 1 tablespoon oil to the pan; add cauliflower rice and stir until beginning to soften, about 2 minutes.
4. Return the chicken mixture and eggs to the pan; add tamari (or soy sauce) and sesame oil (if using) and stir until well combined. Garnish with scallion greens.

P.M. Snack

92 CALORIES

Mango & Kiwi with Fresh Lime Zest

- 1 firm ripe kiwi, diced
- ½ cup diced firm ripe mango
- ½ teaspoon lime zest

Toss kiwi and mango with lime zest.

DAILY TOTALS: CAL 1,484 / **FAT** 44G (SAT 9G) / **CARBS** 198G / **PROTEIN** 88G / **FIBER** 38G / **SODIUM** 1,353MG

FOR SUSTAINABLY FISHED COD, CHOOSE U.S. PACIFIC COD OR ATLANTIC COD FROM ICELAND AND THE NORTHEAST ARCTIC.

DAY 5

Breakfast

286 CALORIES

- 1 cup bran cereal
- 1 cup skim milk
- ½ cup blueberries

A.M. Snack

100 CALORIES

- 1 medium apple
- 1 tablespoon peanut butter

Lunch

574 CALORIES

- 1 serving Green Salad with Pita Bread & Hummus (see page 46)

P.M. Snack

62 CALORIES

- 1 medium orange

Dinner

SERVES 4: 573 CALORIES EACH (INCLUDING RICE AND BROCCOLI)

Cod with Tomato Cream Sauce

1–1¼ pounds cod or tilapia fillets, cut into 4 pieces
3 teaspoons chopped fresh thyme, divided
½ teaspoon salt, divided
¼ teaspoon ground pepper
1 tablespoon extra-virgin olive oil
1 shallot, chopped
2 cloves garlic, minced
¾ cup white wine
1 14-ounce can diced tomatoes
¼ cup heavy cream or half-and-half
½ teaspoon cornstarch

1. Season fish with 1 teaspoon thyme, ¼ teaspoon salt and pepper. Heat oil in a large skillet over medium heat. Add shallot, garlic and 1 teaspoon thyme; cook, stirring, until beginning to soften, about 1 minute. Add wine, tomatoes and the fish to the pan; bring to a simmer. Cover and cook until the fish is cooked through, 4 to 6 minutes. Transfer the fish to a large plate; keep warm.

2. Whisk heavy cream (or half-and-half) and cornstarch in a small bowl. Add to the pan, along with the remaining 1 teaspoon thyme and ¼ teaspoon salt. Cook, stirring, for 1 minute. Divide the fish and sauce among 4 shallow bowls.

SERVE WITH

- 1 cup cooked brown rice
- 1 cup steamed broccoli tossed with 2 teaspoons olive oil

DAILY TOTALS: CAL 1,494 / **FAT** 48G (SAT 10G) / **CARBS** 227G / **PROTEIN** 62G / **FIBER** 46G / **SODIUM** 1,452MG

DAY 6

Breakfast
328 CALORIES

- 1 cup bran cereal
- 1 cup skim milk
- 1 cup blueberries

A.M. Snack
101 CALORIES

- 1 medium pear

Lunch
SERVES 4: 414 CALORIES EACH (INCLUDING TOAST)

Tuna, White Bean & Dill Salad

- 1 15-ounce can no-salt-added cannellini beans (white kidney beans), rinsed and drained
- 2 5-ounce cans solid white tuna (water pack), drained and broken into chunks
- ⅓ cup chopped red onion (1 small)
- 3 tablespoons plus 1 teaspoon honey Dijon-style mustard, divided
- 2 tablespoons light mayonnaise
- 2 tablespoons cider vinegar, divided
- 1⅛ teaspoons dried dill, divided
- 2 tablespoons olive oil
- ⅛ teaspoon kosher salt
- 6 cups fresh baby spinach
- 2 cups cubed, cooked and chilled beets
- Chopped fresh dill and/or ground pepper (optional)

1. Combine beans, tuna and onion in a large bowl. Whisk 3 tablespoons mustard, mayonnaise, 1 tablespoon vinegar, 1 teaspoon dried dill and lemon-pepper seasoning in a small bowl. Add the dressing to the tuna mixture; toss gently to coat. Cover and chill 2 to 4 hours.
2. Combine oil, the remaining 1 tablespoon vinegar, the remaining 1 teaspoon mustard, salt and the remaining ⅛ teaspoon dried dill in a small screw-top jar. Cover and shake well. Combine spinach and beets in a large bowl. Before serving, pour the vinaigrette over the spinach mixture; toss gently to coat.
3. To serve, line 4 serving plates with the spinach mixture. Top with the tuna mixture. If desired, sprinkle with fresh dill and/or pepper.

SERVE WITH

- 1 slice whole-wheat bread, toasted and drizzled with 1 teaspoon olive oil per person

P.M. Snack
200 CALORIES

- 1 medium apple
- 1 tablespoon peanut butter

Dinner
SERVES 1: 467 CALORIES

Toaster-Oven Tostada

- 2 corn tortillas
- ½ cup canned black beans, rinsed
- 2 tablespoons shredded Cheddar cheese
- 2 cups mixed salad greens
- 2 teaspoons freshly squeezed lime juice
- 2 teaspoons extra-virgin olive oil
- ¼ avocado, mashed
- 2 tablespoons pico de gallo or salsa

1. Line a toaster-oven pan with foil and arrange tortillas on it. Top the tortillas with beans and cheese. Toast until the cheese is melted and the tortillas are starting to brown along the edges, 7 to 8 minutes.
2. Meanwhile, place greens in an individual salad bowl. Drizzle lime juice and oil over the greens.
3. Remove the tostadas from the toaster oven and top with avocado and pico de gallo (or salsa). Serve hot with the dressed greens.

DAILY TOTALS: CAL 1,500 / **FAT** 52G (SAT 10G) / **CARBS** 225G / **PROTEIN** 61G / **FIBER** 56G / **SODIUM** 1,399MG

DAY 7

Breakfast
355 CALORIES

- 1 serving Avocado Egg Toast (see page 46)
- 1 cup blueberries

A.M. Snack
218 CALORIES

- 1 cup strawberries
- 1 cup nonfat plain Greek yogurt
- 1 tablespoon slivered almonds

Lunch
488 CALORIES

- 1 serving Tuna, White Bean & Dill Salad (see page 53)
- 1 slice whole-wheat bread, toasted and drizzled with 2 teaspoons olive oil

P.M. Snack
101 CALORIES

- 1 medium pear

Dinner
SERVES 4; 374 CALORIES EACH

Skillet Lemon Chicken & Potatoes with Kale

- 3 tablespoons extra-virgin olive oil, divided
- 1 pound boneless, skinless chicken thighs, trimmed
- ½ teaspoon salt, divided
- ½ teaspoon ground pepper, divided
- 1 pound baby Yukon Gold potatoes, halved lengthwise
- ½ cup low-sodium chicken broth
- 1 large lemon, sliced and seeds removed
- 4 cloves garlic, minced
- 1 tablespoon chopped fresh tarragon
- 6 cups baby kale

1. Preheat oven to 400°F.
2. Heat 1 tablespoon oil in a large cast-iron skillet over medium-high heat. Sprinkle chicken with ¼ teaspoon each salt and pepper. Cook, turning once, until browned on both sides, about 5 minutes total. Transfer to a plate.
3. Add the remaining 2 tablespoons oil, potatoes and the remaining ¼ teaspoon each salt and pepper to the pan. Cook the potatoes, cut-side down, until browned, about 3 minutes. Stir in broth, lemon, garlic and tarragon. Return the chicken to the pan.
4. Transfer the pan to the oven. Roast until the chicken is cooked through and the potatoes are tender, about 15 minutes. Stir kale into the mixture and roast until it has wilted, 3 to 4 minutes.

DAILY TOTALS: CAL 1,505 / **FAT** 64G (SAT 11G) / **CARBS** 151G / **PROTEIN** 88G / **FIBER** 30G / **SODIUM** 1,372MG

CHAPTER 3

GET MOVING

When it comes to keeping your heart healthy, diet is only part of the journey. Here's how to shake up your workouts and get your blood pumping.

WORK OUT FOR A MAJOR HEART-HEALTH BOOST

Your heart is a muscle, and the best way to keep that muscle strong is by hitting the gym. Moderate exercise gets your heart rate up and makes it easier for your heart to pump blood through the body.

BY EMILY JOSHU

Whether you have a family history or risk of heart disease or you just want to get ahead of cardiovascular risk, starting an exercise routine is just as important as what you eat in keeping your heart beating well. "There's a tremendous amount of evidence now that has accumulated over the years through all kinds of research trials showing that exercise is a major behavioral intervention or a habit that clearly reduces the risk of cardiovascular disease, deaths and events," says Kerry J. Stewart, Ed.D., a professor of medicine and director of clinical and research exercise physiology at Johns Hopkins Medicine.

Additionally, patients with obesity can strengthen their heart health through exercise in that reducing abdominal fat lowers the risk of cardiovascular disease. "For people starting an exercise program, they may see a greater loss in inches around the waist more so than weight on a body scale. Diet alone does not reduce belly fat as much as exercise," Stewart says. Before you start adapting your afternoon gym sessions or adding extra miles to your regular run, here is a look at how exercise can keep your heart healthy and how to adjust your diet to fit your cardiac-boosting goals.

Types of Exercise

Between running, hitting the elliptical, riding on the bike and enrolling in dance classes, the options for exercise can feel overwhelming. A balance between aerobic and resistance exercise may be the customizable strategy for success. Swimming, biking, dancing and kickboxing not only are heart strengthening but also have all been proven to improve balance and agility, especially in older people who are at risk

RESEARCH SUGGESTS THAT PEOPLE WHO RUN 30 MINUTES A DAY FOR FIVE DAYS A WEEK ADD AN AVERAGE OF 3½ YEARS TO THEIR LIVES.

of falls and broken bones. Even just strapping on a pair of tennis shoes and going at your own speed around the block can be impactful. A 2014 study in the *Journal of the American College of Cardiology* found that running at slow speeds for just 5 to 10 minutes per day was associated with a reduced risk of death from cardiovascular disease. The authors suggested that these results could motivate sedentary individuals at risk to start this gradual path toward heart-healthy fitness.

Resistance training has been shown to help build muscle mass and lower the risk of heart attack, but you don't have to pick up the dumbbells to reap its benefits. Squats, push-ups, running and chin-ups are quick exercises to do at home. Experts, however, tout combining aerobic and resistance interventions rather than just picking one. "Aerobic and resistance exercises provide unique benefits to your body that you can't get from one or the other alone," says Angelique Brellenthin, Ph.D., a research assistant professor in the department of kinesiology at Iowa State University. Brellenthin is the project manager of CardioRACE, a five-year kinesiology program at Iowa State University in which three exercise groups participate three times per week for 60 minutes over the course of 12 months. One group does aerobic exercise, one does resistance exercise, and one does a combination of the two. The goal is to measure the effects of different exercise approaches on cardiovascular-disease risks. Though the research, which is funded by the NIH, is ongoing, Brellenthin has noticed what participants gravitate toward. "Participants really seem to enjoy the resistance and the combined exercise programs, and they actually have slightly better attendance than the group that's doing the aerobic only, so an initial indicator might be that at least resistance or combined exercise could help people become more active or stay more active in the long run," Brellenthin says.

"Lighter activity may not improve fitness level, but it reduces sedentary time, which is associated with a less favorable cardiovascular-disease risk profile."

The Department of Health and Human Services' 2018 Physical Activity Guidelines for Americans recommend at least 150 minutes of physical activity per week, ideally with aerobic exercises spread throughout the week. But you don't have to hit the gym for 2½ hours every week to improve your heart health. "Some of the biggest health benefits are actually seen when someone goes from doing very little activity—so someone who's completely sedentary—to doing just a little bit more," says Brellenthin. A 2018 study in the *Journal of Physiology*, for example, found that any amount of exercise reduced the overall risk of death from heart disease.

You can, however, build toward that 150-minute goal slowly but surely, at your own pace. Brellenthin recommends getting up from your desk and walking for 5 to 10 minutes or playing a game of pickup basketball over the weekend to start building a routine. "Lighter activity may not improve fitness level, but it reduces sedentary time, which is associated with a less favorable cardiovascular-disease risk profile," said Devon Dobrosielski, Ph.D., an associate professor in the department of kinesiology at Towson University, in an email to *EatingWell*. For those with preexisting conditions, such as diabetes, heart disease or arthritis, eventually building up to that 150-minute benchmark is key for managing those conditions. Walking may prove even more beneficial than running for people with joint sensitivity because of its lower impact. A 2013 study by the American Heart Association, for example, found that equivalent amounts of walking produced similar risk reductions for hypertension as running. Be sure to consult your doctor before starting a new exercise plan, especially if you have heart disease or are at risk for it.

And if you've had a heart attack or other cardiac event, exercise plays a significant role in the recovery regimen. Defined by the AHA as a medically supervised program designed to improve heart health following an event such as heart attack, heart failure, angioplasty or heart surgery, cardiac rehab combines exercise training, stress counseling and heart-healthy lifestyle education. However, only about 1 in 6 eligible patients participates, a 2018 study in the journal *Circulation* found. "Even though the participation in cardiac rehab is not as high as we would like to see it, the benefits of exercise are as powerful, in many

cases, as many drugs that are given to help treat people after their heart attack, so it's really critical that people participate," says Stewart. It can also give patients a sense of initiative and control over daunting and often unpredictable circumstances. "People feel better psychologically, partially because they feel better physically, but partially because they're now engaged in a very active way and taking care of themselves in a way that makes a difference," Stewart says.

While you should consult your doctor if you have a preexisting condition, you can generally alter your fitness routine to your own preferred pace.

What to Eat

Dietary Approaches to Stop Hypertension, or the DASH diet, is a low-sodium, plant-rich eating pattern created with the intent to alleviate high blood pressure and reduce the risk of heart disease. Emphasizing whole grains, leafy greens and lean proteins, DASH is one flexible dietary approach that can be implemented in an exercise program. In Brellenthin's CardioRACE program, three registered dietitians provide DASH diet counseling to participants in all three groups, as well as to the control group. "The optimal heart-healthy diet and exercise would be combining more plants, more grains, more fiber-rich foods on the plate while also focusing on cardio and strength," says Alexandra Caspero, R.D., owner of the nutrition practice Delish Knowledge in St. Louis.

But when it comes to complementing new levels of fitness, there's no need to drastically alter calorie intake or pack in the protein

powder at every meal, since you're not expending the energy of an elite athlete. "For the most part, your diet is naturally going to be where it needs to be," Caspero says. "For the average person who's just trying to get a little bit healthier, focusing on a healthy diet is going to be the best thing to do. I wouldn't tell them to stress at all about getting enough protein or calories because most people naturally fit those in just because we tend to be a little bit more excessive with our nutrient needs."

With meal timing, however, the more active you are, the more calories you may consume due to expending higher levels of energy. "You want to eat most of your calories when you're most active," says Barbara Lewin, R.D.N, C.S.S.D., a sports nutritionist and owner of sports-nutritionist.com. Skimping on calories when you need them most could break down lean muscle tissue and deplete muscle glycogen—or energy—stores.

Years of inactivity can lead to blood clots as the heart gradually becomes weaker and unable to pump as much blood.

But there's no need to overhaul your calorie counts when you exercise moderately. "There's a big fallacy that people think that they can eat all they want now that they're exercising," Lewin says. However, nutrient needs can vary with age. While most Americans eat too much protein—the recommended dietary allowance calls for about 10% of daily calories to come from protein, whereas the average American consumes about 16%—people over age 65 need more protein to maintain muscle mass that naturally declines with age. Caspero recommends complementing increased protein intake with strength training to prevent the loss of muscle mass, metabolic rate and bone health.

If you're transitioning to a new fitness plan after years of inactivity or following a cardiac event, however, you don't have to overhaul the workouts and diet all at once. If you live a more sedentary lifestyle, such as working a desk job, you may benefit more from focusing on either diet or exercise, not both, at first. "Sometimes I find it easier for my clients to focus on one thing at a time," Caspero says. "You don't have to make every change overnight." Once you have a handle on regularly cooking healthy meals, implementing a workout routine feels far more manageable.

What Happens When You Stop Working Out

"A lot of the changes that occur secondary to physical inactivity are often not felt, but there are things below the skin," Stewart says. The compounding effects of years of inactivity, such as rising blood pressure, are often subtle but still vital to consider when transitioning to a more active lifestyle. On the outside, you may feel more drained carrying laundry or walking up the stairs, or you may toss and turn more at night. Beneath the skin, especially with age, are physiological changes, such as diminishing muscle mass, and slower metabolism could result in slow weight gain. This heightens the risk of inflammation, which increases insulin resistance and exacerbates the risk for diabetes, which then also raises the risk of heart disease.

"We don't often 'feel' cardiovascular disease until it reaches a severe stage," Dobrosielski said, citing chest pain during a heart attack as an example. "Therefore, we need to be out in front." In addition to increased risk of inflammation and slowing metabolism, years of inactivity can lead to blood clots as the heart gradually becomes weaker and unable to pump as much blood. Stewart also says that lack of activity can weaken the endothelium, the inner lining of the blood vessels, which exacerbates the risk of cardiac events.

To get in front of this gradual deterioration, Brellenthin recommends starting small and then increasing the demand over time—but don't let it become a dreaded part of the day. "There's really no one activity that is better than others," she says. "If you love walking, there's no reason that you need to progress to jogging if you don't like it. Keep experimenting until you find an activity or a variety of activities that you truly enjoy."

But no matter what you choose to start with, it's never too late to get active, even after a cardiac event. "There's never an age where it's too late to start," Stewart says. "The earlier you start, the more likely you'll live long enough to see more benefits." ●

REGULAR AEROBIC EXERCISE HELPS STRENGTHEN YOUR LUNGS AND HEART AND CAN LEAD TO LOWER BLOOD PRESSURE.

FITNESS STRATEGIES

5 PROVEN WAYS TO STAY FIT

These approachable strategies and methods make getting in heart-healthy shape well within reach.

1 Tweak Your Workouts

Even a small amount of weight loss gives your heart a major health boost.

If you've been hitting the gym regularly and moving more throughout the day but you haven't seen any change in your weight, a few simple steps can help you shake off some weight for your heart.

To successfully drop the pounds, you need to exercise wisely—and resist the urge to eat more just because you're working out. People often overcompensate for exercise when they eat, says Mary Jane Detroyer, R.D., a dietitian and exercise physiologist in New York City. "They feel like they've earned a treat." That can set the stage for overeating. The result: you may wind up taking in more calories than you burned.

To help yourself out, choose the right workout to help keep your hunger in check. According to recent research published in the *Journal of Endocrinology*, turning up your exercise intensity or workout length may blunt your appetite.

In two small experiments, researchers found that men who pushed themselves with a tough run had lower levels of ghrelin, a hormone that signals hunger, than those who did a light or moderate jog.

How can you maximize your routine? The following strategies will help you make the most of your workout and rein in your hunger so you can finally score serious results.

TACK ON 10%
Each week, bump up your workout by 10%, Detroyer suggests. That may mean slightly increasing the intensity on the elliptical or running for a few extra minutes each time. When you do that, you'll push yourself a little harder while letting your body build up strength and endurance, which can help prevent injury.

MAKE USE OF YOUR DOWNTIME
Instead of scrolling through your feed between sets, get moving! Fitz Koehler, a fitness expert and founder of Fitzness.com, recommends turning that break into active rest by jogging in place or doing jumping jacks or burpees. You'll burn calories and strengthen your heart while upping your workout intensity.

ADD INTERVALS
During your next workout, keep your eyes on the clock. Detroyer suggests pushing yourself at 80% to 90% of your maximum effort for two to three minutes (you should be breathless), followed by the same amount of time of easy recovery. These intervals help you torch more calories, and they may keep your hunger in check. One study published in the *International Journal of Obesity* found that overweight men who did interval workouts ate fewer calories over the next day and a half than those who hadn't switched up their pace.

SHAKE THINGS UP
When you do the same exercise time and again, your body adapts, Koehler says. To challenge your muscles and kick-start your progress, try something new. Sign up for a different class at the gym or take your workout outside. Run on a trail, go out on your bike or create your own circuit routine.

WEIGHT LOSS ISN'T ALL OR NOTHING. LOSING AS LITTLE AS 5% OF YOUR BODY WEIGHT CAN REDUCE YOUR RISK OF HEART DISEASE.

2 When in Doubt: Walk It Off

Walking can do more than get you from point A to point B. This classic activity can improve your heart health, blood sugar and more.

It's convenient. It's free. And it comes with a wealth of benefits, including heart health. Don't underestimate the power of America's favorite physical activity—walking! All you have to do is lace up and head out the door. No gym or fancy equipment necessary. Witness some of the latest evidence for the benefits of walking.

IMPROVE BLOOD SUGAR
A short jaunt around the block after you eat could help keep your blood-sugar levels steady, especially if you have type 2 diabetes, according to research published in the journal *Diabetologia*. When adults with the condition walked for 10 minutes following every meal, they lowered their blood sugar 12% more, on average, than when they took a single 30-minute stroll each day. "Walking uses large muscles in your legs and torso—which require a lot of energy," explains Andrew Reynolds, Ph.D., the lead study author and a postdoctoral fellow at the University of Otago in New Zealand. "To get that energy, those muscles remove sugar from circulation and your blood sugar goes down." He adds that after-meal walks may also help prevent diabetes in the first place.

HELP YOUR HEART
You don't need crazy-hard cardio to strengthen your heart. A review of data from more than 130,000 women, published in the *Journal of the American College of Cardiology*, found that those who walked at least 30 minutes a day significantly lowered their risk of heart failure. Other research has found that exercisers—most of whom were walkers—reduced systolic blood pressure (the top number) by an average of nearly 9 mmHg, an improvement similar to that from medication, according to a meta-analysis in the *British Journal of Sports Medicine*. Getting at least 150 minutes of moderate-intensity exercise, like brisk walking, each week is the benchmark for heart benefits, according to the American Heart Association.

IMPROVE FERTILITY
For couples trying to get pregnant, here's a reason to hoof it: researchers from the University of Massachusetts at Amherst found that overweight and obese women who regularly walked for at least 10 minutes at a time were nearly twice as likely to conceive as those who didn't go for a stroll. The researchers say that being at an unhealthy weight—which applies to nearly three-quarters of us—is linked to higher levels of chronic inflammation, which can affect fertility. But walking reduces that inflammation and may lower stress levels, benefits that improve your odds of welcoming that bundle of joy.

SIT LESS, MOVE MORE
Spending too much time on your tush can lead to numerous health woes. But here's an easy fix: after an hour of sitting, walk around for 2 minutes. It could reduce your risk of early death by 33%, according to a study published in the *Clinical Journal of the American Society of Nephrology*.
—Julia Westbrook

3 *Om* Your Way to Better Health

Yoga's benefits stretch beyond boosting flexibility. Researchers keep finding new reasons everyone should hit the mat.

RELIEVE LOWER-BACK PAIN

Forget bed rest—today's docs often prescribe exercise, yoga included. Practicing yoga may ease back pain better than avoiding exercise, concluded a scientific review tallying results from more than 1,000 men and women who had all suffered from low-back pain for three-plus months. It may be better to do yoga than to skip your workout because of yoga's relaxation, meditation and breathing elements. Most studies asked participants to attend a 60- to 90-minute class once or twice a week and practice at home on nonclass days. Beginners should find a class designed to ease low-back pain so an experienced instructor can help you protect your back.

BOLSTER YOUR BONES

Just 12 minutes of yoga a day may keep your bones strong, according to a study published in *Topics in Geriatric Rehabilitation.* More than 200 individuals, mainly women averaging 68 years old, did 12 minutes of yoga daily (or at least every other day) for two years. They held 12 poses for 30 seconds each. The result: improved bone density. In fact, the progress surpassed bone-building results typically seen with osteoporosis-countering drugs. Why? Using your muscles makes your bones stronger. Since yoga uses several muscle groups at once, you're exerting force on the bone from multiple angles, possibly enhancing the bone-building process.

STRENGTHEN YOUR HEART

Move over, cardio. Researchers evaluated almost 40 trials and found that yoga came with numerous heart-friendly benefits: lowering LDL ("bad") cholesterol and triglycerides, increasing HDL ("good") cholesterol and improving body weight, blood pressure and heart rate. Yet how does this stack up against aerobic activity like jogging? Surprisingly high. "Yoga achieved similar improvements to aerobic exercise," says Myriam Hunink, M.D., Ph.D., a co-author of the study. The study points to several factors about yoga that may be responsible for these changes, including the strengthening, stretching, breathing, meditation and relaxation aspects.

—Karen Asp

4 Exercise Without Even Knowing It

If you can't make time for the gym, here are some sneaky strategies for working heart-healthy activity into your day.

Only 1 in 4 Americans meets the recommended guidelines for physical activity put forth by the CDC. It recommends at least 150 minutes of moderate-intensity exercise or 75 minutes of vigorous exercise (or any combination of the two) each week. The CDC also suggests adding strength training for an extra health boost. That may sound like a lot of exercise, but if you briskly walk for 30 minutes, 5 days a week, you can hit the mark. Breaking it up into shorter bouts is OK, too, as long as they're more than 10 minutes. New research published by *JAMA Network Open* found that light physical activity can lower the risk of cardiovascular disease in women ages 60 and older.

Instead of forcing yourself to hit the gym if that overwhelms you, try to find an activity that you do enjoy. It might be having a dance party in your kitchen or making walking dates with a friend. Here are some excellent ways to exercise without even knowing it.

WASH YOUR CAR
Embrace the summer heat—with a hose: burn calories and make your car look beautiful as you wash, dry and get it (and you) buff. And no, driving through the car wash doesn't count!

DO YOUR OWN YARDWORK
Mow your lawn with a push mower. The steps and the pushing will have you breaking a sweat while keeping your lawn looking fresh. Weed the vegetable garden and toss some new mulch around the plants out front. Even if you don't have a green thumb, gardening can be a workout.

REINSTATE THE "WATERCOOLER"
Everyone needs a periodic work break, but instead of emailing witty quips to your buddy in the next office, walk to the watercooler to dish about your latest Netflix guilty pleasure. Even better, take a lap around the office or building.

GET STARTED ON THAT HOME-IMPROVEMENT PROJECT
Painting, hammering, hoisting—it's all exercise (some of it moderate to vigorous, we'd say). And don't discount all the walking that you'll do as you wander around the big home-improvement warehouse looking for that specific hinge.

BORROW A DOG
Dog owners are more likely to stay active, so if you're already a proud dog mom or dad, you're in good shape. Otherwise, offer to dog-sit for a friend or neighbor in need or volunteer at a local animal shelter as a dog walker.

EAT OUTSIDE
Pack a picnic—one that requires schlepping a big ice-filled cooler across a field or park. Take a ball or a Frisbee to get some activity before you dig in.

ACCORDING TO
HARVARD HEALTH,
PAINTING THE
WALLS INSIDE
YOUR HOUSE
BURNS CALORIES
AT THE SAME RATE
AS WALKING
AT 4 MPH.

5 Stand Up to Help Your Health

Spending time on your feet delivers some health benefits. But it can have risks. Here are the pros and cons, along with simple ways to sit less and stand more.

Sitting all day at a desk or plopped in front of the TV can do more than leave you achy and stiff. Multiple studies show that hours of sitting can up your risk for obesity, type 2 diabetes and heart disease—even if you get the recommended 2½ hours of exercise each week.

But don't rush out to buy that standing desk just yet. New research suggests that while standing more can help offset the negative effects of too much sitting, staying on your feet all day can hurt your health too. Here are the pros and cons of standing more—plus some simple ways to get off your bum throughout your day.

HEALTH BENEFITS OF STANDING

A recent study published in the *European Journal of Preventive Cardiology* suggests that standing may help with weight loss—a little. Looking at results from 46 studies, researchers found that standing burns an extra 0.15 calorie a minute. At that rate, a 140-pound person who stands for six hours could burn an extra 54 calories a day, potentially losing around 5 pounds a year.

True, that kind of calorie burn won't help you fit into your swimsuit in a hurry. But standing more may help prevent weight gain, the study authors say. Other ways standing may help your health, according to several studies:

- Better mood
- Less back and shoulder pain
- More stable blood sugar
- More movement overall (because let's face it: most of us fidget on our feet)
- Lower risk of diabetes and obesity due to less time sitting

HEALTH RISKS OF STANDING TOO MUCH

Recent research has found that standing for long stretches at a time can lead to varicose veins, backaches, fatigue, slower thinking and reduced productivity.

And that's not all. A 12-year study of more than 7,000 people found that workers who stood on the job day in and day out—people like bank tellers, hairstylists and retail clerks—had nearly double the risk of heart disease compared with those who mostly sat. Standing that much may make it harder for your heart to pump blood to your upper body, creating pressure on the veins and raising the risk of heart problems, the researchers say.

The bottom line? Get off your bottom more. If you work at a desk, take frequent breaks to stand up and move around. You'll lessen the effects of sitting and gain the perks of standing without overdoing it.

STANDING AT WORK

If you have an office job, you don't have to stop work to start standing more. Here are some ideas:

- Try taking calls on your feet or invite your colleagues to stand-up or walking meetings.
- Take advantage of time at the copier to stand while you print a report or make a habit of drinking your coffee upright. When you associate a particular activity with standing, you'll be more likely to remember to get out of your chair.
- And there's no reason to plop down in your colleague's spare chair while you're working

+ LOOK AT ANY SHADED BLOCKS OF 90 MINUTES OR MORE—THESE PRESENT PRIME OPPORTUNITIES TO WORK IN MORE MOVEMENT.

on a project together—you may even find that you're more creative when you're on your feet.

- If you already have a standing desk, listen to your body and take breaks when you need to. Standing puts pressure on your lower back, knees, feet and legs, so switch to a chair when you start to tire. Some experts recommend the 20-8-2 rule: sit for 20 minutes, stand for 8, stretch or walk for 2. Varying your desk height can help too.
- Don't forget to take posture checks: stand with your feet shoulder-width apart, knees straight but not stiff, shoulders up and back. No hunching!

OUT AND ABOUT

- When you're in transit, give your seat to someone else on the subway or bus. You'll use even more muscles just by balancing on a moving vehicle.
- If you're flying somewhere, counteract the seat-belted time on board the plane by standing up while you're waiting to board. And don't be tempted to sink into a chair while waiting for your baggage. You might feel tired (or jet-lagged), but sitting will just make you more lethargic.

STANDING AT HOME

Housework is a great way to squeeze in some lifestyle activity time.

- Volunteer to cook dinner or wash the dishes.
- Maximize your TV time by standing up to iron and fold laundry. Wiping down windows and mirrors counts too.
- While you're at it, climb a few stairs and carry that laundry basket—the more you move, the better. ***—Laurie Herr***

CHAPTER 4

LONG-TERM SUCCESS

While approaching heart-healthy eating may seem daunting, look to these real-life strategies, such as plant-forward eating and mindful drinking, to shape your meals for a lifestyle that lasts.

THE MIGHTY MEDITERRANEAN

The saying "what's old is new again" rings true when it comes to the Mediterranean diet. This delicious, heart-healthy way of eating is the O.G. diet—and the center of what healthy means now.

BY HOLLY PEVZNER

You've heard it, you know it: The Mediterranean diet is crazy healthy. In fact, if the typical American ate a traditional Mediterranean diet, this could lower heart disease and stroke risk by about 30% to 40%, says Walter Willett, M.D., Dr.PH., of the Harvard T.H. Chan School of Public Health. But guess what else it is? It's hands-down one of the easiest and most delicious diets in the world. It's rooted in diversity and flavor. And it's millennia old. People eating the Mediterranean way in Italy, Spain or Greece are not sneaking greens into their smoothies. They're not pinning complicated recipes that require multiple cooking methods. Instead, they're leisurely dining on an abundance of produce, fish, whole grains, olive oil and what we now dub "artisanal" cheeses. They're embracing fresh, local ingredients. In essence, old-school Mediterranean dining is the ultimate in modern eating. It's minimalist without the hoity-toityness of it all. It's healthy without the blinding halo. It's a celebration of real food made with whole ingredients. Here are the 10 big-hitter tentpoles that hold the most modern of ancient diets all together.

1 FISH
The communities that dot the Mediterranean Sea make fish-based meals a part of life. Mackerel, sea bass, shrimp, mussels and sardines are prepared simply with olive oil, herbs, spices and lemon, or they're tossed in pasta dishes or salads. "Not only is fish eaten more readily, but red meat is only consumed a few times a month," says Connie Diekman, R.D., author of *The Everything Mediterranean Diet Book*. This combo lowers the risk of heart disease, diabetes and cancer thanks to a balanced fat ratio.

2 OLIVE OIL
Olive oil is the prime fat in the Mediterranean diet, trumping butter and vegetable oil. It's delicious and chockfull of heart-healthy unsaturated fats. "Plus, oleocanthal, an antioxidant in olive oil, has anti-cancer properties," says Kelly Toups, R.D., of the nutrition nonprofit Oldways. The most flavorful and healthful option? Cold-pressed extra-virgin olive oil. While most experts recommend up to 5 teaspoons of olive oil a day, studies have shown that 12 teaspoons daily can boost "good" HDL cholesterol.

+
FRUITS, VEGGIES,
WHOLE GRAINS,
OLIVE OIL, LEGUMES,
HERBS AND NUTS
ARE HEART-HEALTHY
STAPLES THAT
CAN BE ENJOYED
MULTIPLE TIMES
A DAY.

"DON'T GET CAUGHT UP IN TOO MANY DOS AND DON'TS," SAYS CONNIE DIEKMAN, R.D. "A GOOD FIRST STEP IS TO ADD MORE VEGGIES TO WHAT YOU'RE ALREADY EATING."

3 QUALITY DAIRY
It's hard to imagine a Mediterranean meal sans cheeses or yogurt. They do love their dairy, but quality beats quantity. Often, instead of dairy serving as a main component, Toups says, "dairy is integrated as a flavor into the meal." Think: a dollop of tangy yogurt atop veggies or a kebab accented with ever-so-slightly grilled chunks of cheese. (Folks are not short on calcium. The Med diet leans heavily on nondairy calcium-rich foods, such as leafy greens, beans and bony fish like sardines and anchovies.)

4 LEGUMES
While beans are the most famous of the legume family, peas, lentils, chickpeas and even peanuts are also part of the clan. "Legumes became a huge part of the Mediterranean diet because they were affordable sources of protein when meat wasn't," says Toups—and they're high in fiber and antioxidants, which protect against cancer and heart disease. Legumes are diverse, too: they're a perfect addition to ragouts or whole-grain dishes, and they can be mashed and blended with herbs and spices to make amazing dips and spreads.

5 RED WINE
Who doesn't love a diet that features a daily 5-ounce glass of red? Wine, says Toups, is sipped slowly and enhances food's enjoyment. For women, one glass is on the menu; for men, it's up to two. For the most heart-healthy antioxidants, toast with a Cannonau, pinot noir, Shiraz, zinfandel, cabernet sauvignon or merlot. But no matter what's in your cup, it's just as important to clink glasses with friends, so teetotalers, don't sweat.

6 VEGETABLES
Fewer than 9% of Americans eat enough veggies. Part of the problem: "The recommendation tends to trigger an I-can't-do-that reaction, and people stop trying," says Diekman. But those enjoying the Med diet aren't counting—they simply believe that no meal is complete without vegetables. Veggies are folded into pasta, hearty stews and sauces. They're also dressed in olive oil, which enhances your body's ability to absorb health-promoting carotenoids. "Veggies' disease-fighting compounds may be why the diet is so good for you," says Diekman.

7 WHOLE GRAINS
A plain-Jane side scoop of brown rice is not quite the Med way. "Mediterranean eating casts grains in a leading role," says Toups. "Grains stretch seasonal vegetables, cheeses or fish into a satisfying, cohesive meal." You see grain salads, such as herby tabbouleh; crunchy barley rusks eaten like croutons; and whole-grain cornmeal in polenta that's topped with veggies. This flavoring up of grains is smart: people who eat whole grains every day have a 9% lower chance of dying from heart disease, says a study published in *JAMA Internal Medicine*.

8 FRUITS
For the non-Mediterranean set, fruit is a snack, a smoothie add-in and a tried-and-true breakfast accompaniment. But fruit has a more diverse role in the Mediterranean diet. It's eaten fresh, baked, poached and dried. It's in desserts and veggie salads and mixed into yogurts. "Don't get caught up in what specific fruit to eat," says Diekman. "Rotate a diverse selection of whole fruit." While fruits' benefits are far-reaching, research shows that those who eat a Med diet including about 5 ounces of fruit daily are 15% less likely to have macular degeneration.

9 NUTS AND SEEDS
Nuts and seeds tend to fall directly into our collective snack basket, and we also sprinkle some on salads and into baked goods. But as those in the Mediterranean will tell you, there's a lot more this duo can do. Crush them into breadcrumbs; mix them into a barley, farro or bulgur wheat dish; blend them into homemade breads; or toss them onto sautéed veggies. There's good reason to: people who ate 5 to 6 servings of nuts a week cut their risk of heart disease by nearly a quarter and their cancer risk by 19%, notes a 2016 report.

10 EAT WITH OTHERS
A true Mediterranean "diet" goes beyond what is on your plate. "It's a lifestyle," says Diekman. "Meals are eaten slowly, amongst friends and family." TVs aren't on. Phones are tucked away. Attention is divided only among food, wine and company. All of this makes for a pleasant, more mindful experience—and a healthier one. For instance, people who never watched TV while eating were 37% less likely to be obese than those who always did, notes a 2017 study in the *Journal of the Academy of Nutrition and Dietetics*. ●

Mediterranean Recipes

Here are some delicious and simple recipes to help you sail further into those Mediterranean waters.

BY AMY RIOLO, R.D.

Greek Roasted Fish & Vegetables

ACTIVE: 35 min
TOTAL: 55 min

- **1 pound fingerling potatoes, halved lengthwise**
- **2 tablespoons olive oil**
- **5 cloves garlic, coarsely chopped**
- **½ teaspoon sea salt, divided**
- **½ teaspoon ground pepper**
- **2 medium red, yellow, and/or orange peppers, cut into rings**
- **2 cups cherry tomatoes**
- **1½ cups chopped fresh parsley**
- **¼ cup pitted Kalamata olives, halved**
- **¼ cup finely snipped fresh oregano or 1 tablespoon dried oregano, crushed**
- **4 5- to 6-ounce fresh or thawed frozen skinless salmon fillets**
- **1 lemon**

1. Preheat oven to 425°F.

2. Toss potatoes in a large bowl with 1 tablespoon oil, garlic and ⅛ teaspoon each salt and pepper. Transfer to a 15-by-10-inch baking pan; cover with foil. Roast 30 minutes.

3. Toss peppers, tomatoes, parsley, olives and oregano with the remaining 1 tablespoon oil and ⅛ teaspoon each salt and pepper.

4. Rinse salmon; pat dry. Sprinkle with the remaining ¼ teaspoon each salt and pepper. Spoon pepper mixture over the potatoes and top with the salmon. Roast, uncovered, just until the salmon flakes, about 10 minutes more.

5. Zest lemon. Squeeze the juice over the salmon and vegetables. Sprinkle with the zest.

SERVES 4: 4 oz. salmon & 1½ cups vegetables each

CAL 422 / **FAT** 19G (SAT 2G) / **CHOL** 78MG / **CARBS** 31G / **TOTAL SUGARS** 7G / **PROTEIN** 33G / **FIBER** 6G / **SODIUM** 593 MG

Mediterranean-Style Egg & Tomato Skillet with Pita

ACTIVE: 30 min
TOTAL: 40 min

- 2 tablespoons olive oil
- 2 cups chopped red peppers
- ½ cup chopped onion
- 2 tablespoons no-salt-added tomato paste
- 1 teaspoon smoked paprika
- ½ teaspoon crushed red pepper
- 3 cups chopped tomatoes
- 1 teaspoon ground cumin
- ¼ teaspoon salt
- 4 eggs
- ½ cup low-fat plain Greek yogurt
- Snipped fresh parsley
- 2 whole-wheat pita bread rounds, halved crosswise and warmed

1. Heat oil in a large skillet over medium heat. Add peppers, onion, tomato paste, paprika and crushed red pepper. Cook, stirring occasionally, until the onion is tender, 5 to 7 minutes. Stir in tomatoes, cumin and salt. Bring to a boil; reduce heat and simmer until the tomatoes begin to break down, about 10 minutes.

2. Make 4 indentations in the tomato mixture. Break an egg into each indentation. Cover and simmer until the whites are completely set and the yolks begin to thicken but are not hard, 5 minutes.

3. Top with yogurt and sprinkle with parsley. Serve with pita bread.

SERVES 4: 1 egg & 1 cup vegetables each

CAL 303 / **FAT** 13G (SAT 3G) / **CHOL** 189MG / **CARBS** 33G / **TOTAL SUGARS** 11G / **PROTEIN** 15G / **FIBER** 6G / **SODIUM** 410MG

PAIR SKEWERS WITH HIGH-FIBER BARLEY, A NORTH AFRICAN STAPLE THAT BECAME POPULAR IN OTHER MEDITERRANEAN COUNTRIES.

Chicken & Vegetable Souvlaki with Barley Pilaf & Tzatziki

ACTIVE: 1 hr
TOTAL: 1½ hrs (not including marinating time)

- ½ cup lemon juice
- ¼ cup olive oil
- ¼ cup snipped fresh parsley
- 6 cloves garlic, minced
- 1 teaspoon salt, divided
- ¼ teaspoon pepper
- 1 pound skinless, boneless chicken breast halves, cut into 1-inch pieces
- 2 cups cherry tomatoes, divided
- 1 cup water
- ½ cup regular pearled barley
- 2 tablespoon snipped fresh basil, plus more for garnish
- ½ cup coarsely shredded English cucumber
- 1 5.3-ounce carton low-fat plain Greek yogurt
- ¼ cup snipped fresh dill
- 2 medium zucchini, halved lengthwise and sliced ¼-inch thick
- 2 medium peppers, cut into 1-inch pieces
- 1 small red onion, cut into 8 wedges
- Lemon wedges

1. Combine lemon juice, oil, parsley, garlic, ½ teaspoon salt and pepper in a large shallow dish. Add chicken, turning to coat. Cover; marinate in the refrigerator up to 2 hours.
2. For pilaf, cut 1 cup tomatoes in half. Combine in a small saucepan with water, barley, basil and ¼ teaspoon salt. Bring to a boil; reduce heat. Cover and simmer until the barley is tender and the water is absorbed, 45 minutes.
3. For sauce, press cucumber through a sieve to remove as much liquid as possible. Combine in a small bowl with yogurt, dill and the remaining ¼ teaspoon salt.
4. Drain the chicken, discarding marinade. Thread the chicken on eight 14-inch skewers with the remaining 1 cup whole tomatoes, zucchini, peppers and onion, leaving ¼ inch between pieces.
5. Grill the skewers, covered, over medium heat, turning once, until the chicken is no longer pink and the vegetables are tender, 10 to 12 minutes.
6. Serve the skewers with the pilaf, sauce and lemon wedges. Garnish the pilaf with more basil, if desired.

SERVES 4: 2 skewers, ½ cup pilaf & 3 Tbsp. sauce each
CAL 371 / **FAT** 11G (SAT 2G) / **CHOL** 86MG
CARBS 35G / **TOTAL SUGARS** 10G /
PROTEIN 35G / **FIBER** 8G / **SODIUM** 500MG

Fisherman's Stew with Roasted Garlic Crostini

ACTIVE: 30 min
TOTAL: 1¼ hrs

- 1 head garlic
- 1 teaspoon olive oil plus 3 tablespoons, divided
- 12 ounces fresh or thawed frozen large shrimp in shells
- 2 pounds fresh or thawed frozen skinless cod fillets
- 12 ounces fresh mussels in shells, debearded
- 1 tablespoon snipped fresh parsley, plus more for garnish
- 5 cloves garlic, minced
- 1 tablespoon no-salt-added tomato paste
- 1 cup dry white wine
- 2 cups chopped tomatoes
- ½–1 teaspoon crushed red pepper
- ¼ teaspoon ground pepper
- 1 cup water
- 6 1-ounce slices whole-wheat Italian or sourdough bread

1. Preheat oven to 400°F. Cut off top ½ inch of garlic. Place the head on a double thickness of foil. Drizzle with 1 teaspoon oil; wrap with the foil. Roast for 50 minutes; let cool.

2. Peel and devein shrimp, leaving tails intact, if desired. Rinse fish and shrimp; pat dry. Cut the fish into 2-inch pieces. Scrub mussels in cold water.

3. Heat 2 tablespoons oil in a large pot over medium heat. Add parsley and garlic; cook, stirring, for 30 seconds. Add tomato paste; cook, stirring for 1 minute. Add wine. Increase heat to high and cook, stirring, for 5 minutes. Add tomatoes, crushed red pepper to taste and pepper. Cook, stirring occasionally, for 5 minutes. Stir in water. Cover and simmer for 10 minutes.

4. Add the fish, shrimp and mussels. Cover and cook until the fish flakes easily, shrimp are opaque and mussel shells open, 5 to 7 minutes. Discard any mussels that do not open.

5. For crostini, brush both sides of bread with the remaining 1 tablespoon oil; place on a baking sheet. Bake until toasted, about 3 minutes. Squeeze the garlic cloves from their skins and spread onto bread.

6. If desired, top the stew with additional parsley. Serve with the garlic crostini.

SERVES 6: 2 cups each
CAL 417 / **FAT** 12G (SAT 2G) / **CHOL** 160MG / **CARBS** 23G / **TOTAL SUGARS** 3G / **PROTEIN** 47G / **FIBER** 3G / **SODIUM** 410MG

COCKTAIL CONUNDRUM

New research has us asking if alcohol is good or bad for us. Many experts still say occasional drinking is perfectly fine. Here's the science behind how alcohol affects our hearts, health and happiness.

BY RACHAEL MOELLER GORMAN

Millions of years ago, before humans walked the earth, a monkey discovered a novel treat on the rain-forest floor: a piece of overripe fruit. The strong ethanol smell from the fermenting flesh drew him to the produce's precious calories, and the fruit was safe to eat because the alcohol repelled bacteria. He enjoyed the taste and experienced a pleasant rush and a full stomach. Monkeys attracted to the scent and taste of alcohol may have had a selective advantage: they were able to find and eat more nutritious fruit than those not enticed by it, improving their health and enabling them to reproduce more often. It follows that these well-fed monkeys were also more likely to pass on genes predisposing their progeny to seek out this tasty, easily digestible discovery—and that these genes eventually found their way into humans.

This so-called "drunken monkey" hypothesis, espoused by Robert Dudley, Ph.D., an evolutionary physiologist at the University of California, Berkeley, while controversial, could explain the beginnings of our obsession with booze. Today, 73% of Americans regularly consume alcohol, up from 65% in 2002, according to recent research published in the journal *JAMA Psychiatry*. We socialize around cocktails, we toss back beers while watching sporting events, we ease a stressful day with a nice glass of whatever you like. And not only are more of us drinking, but the study found we're also drinking more heavily. High-risk alcohol consumption among women has increased 58% since 2002, and alcohol-use disorder has shot up 84%. In men, high-risk consumption has risen 16%, while alcohol-use disorder has gone up 35%. Among Americans ages 65 and over, those numbers are

even higher: 65% and 107% respective upticks.

Sobering stats, considering how bad excessive alcohol consumption is for our bodies. But maybe not as sobering as the recent news that even those of us who drink responsibly may be putting our health at risk. In 2018, a large, global review of studies published in *The Lancet* declared that "No amount of alcohol is safe to consume." Period. End of sentence. And a flood of flashy headlines from every major news outlet followed, amplifying the study's conclusion and summarily contradicting the decades-old belief that moderate alcohol consumption benefits heart health. So does this mean we should give up our nightly glass? No. Not at all.

When you dig into the subtleties and limitations of this shiny new study—and, very important, give weight to the fact that, for many, drinking is a basic innate pleasure, as that monkey discovered—the facts are far from the buzzkill they've been made out to be.

Today, 73% of Americans regularly consume alcohol, up from 65% in 2002, according to recently published research.

To be clear, no one disputes that regularly overimbibing is a serious health issue. Alcohol is a toxin, after all. In high amounts over many years, drinking can damage your liver, blood vessels and heart. It also increases inflammation and blood pressure and may alter gene expression, leading to various types of cancer and other problems. And at some point, heavy drinking can become a full-blown addiction. The controversy lies in whether moderate drinking—a nice glass of cabernet or IPA—is safe.

Alcohol Called into Question

For years, we have been told, "Yes, sip away—it's good for your heart." (Although there is evidence linking alcohol use with cancer risk, particularly breast cancer.) That advice goes all the way back to the 1990s, when the low-fat craze held Americans in its sway, and we were terrified that eating fat in any form would give us heart disease. But then in 1991, *60 Minutes* aired an episode on the French paradox—the realization that even though French people had high-fat diets that included buttery croissants, frites and Brie, their risk of cardiovascular disease was low. The host, Morley Safer, asked Serge Renaud, M.D., Ph.D., a research scientist at the prestigious French National Institute of Health and Medical Research, why. His answer: moderate amounts of red wine with meals. Americans rejoiced—drinking wine can save our hearts from our high-fat diets!—and wine sales skyrocketed. In 1992, Renaud followed the claim with a study backing up his theory. And research on resveratrol, an antioxidant in red wine believed to protect against heart disease and promote longevity, followed in the mid-'90s.

But since then, studies on larger groups of people, using more modern methods, have been quietly building the case that drinking alcohol actually doesn't offer these benefits. And 2018 was a particularly bad vintage for those imbibing under the guise of health. Max Griswold, M.A., a senior research scientist at the University of Washington, published the headline-grabbing *Lancet* study in collaboration with hundreds of colleagues from around the world. It wrapped together a massive amount of data from 195 countries into one magnum of a paper.

The researchers tried to fix a few problems found in previous studies: people's memories of food and beverage consumption are notoriously inaccurate, so in addition to surveying participants on their drinking habits, they also used data on alcohol sales and even adjusted for the amount tourists drank and for those brewing at home. Most previous research on the health outcomes of alcohol intake simply compared people who drank with those who didn't. But there's a big problem with that. People who abstain often have a health problem, a history of addiction or a family member with alcoholism, which is why they choose not to drink. In addition, many people who eschew alcohol do so because they can't afford it. (The *JAMA Psychiatry* study found that 64% of people with household incomes under $20,000 a year drink, compared with 81% of those earning $70,000 or more.) And lower incomes are associated with poorer health. So while in previous studies it seemed as if alcohol was the reason moderate drinkers had a lower risk of heart disease and other problems, it may have actually been because teetotalers tend to be less healthy.

ALCOHOL DEPRESSES THE PRODUCTION OF ANTIDIURETIC HORMONE (ADH), WHICH HELPS KEEP YOU HYDRATED.

Griswold and his fellow study authors took all that into consideration as they analyzed 592 previously conducted studies for the effect of alcohol on 23 different health outcomes, including accidents, cancers, diabetes, several different heart conditions, liver disease and stroke, in addition to adding their new data and methods of processing the information. Their conclusion: "The level of alcohol consumption that minimized harm across health outcomes was zero standard drinks per week." Even though the researchers did see a lower risk for coronary heart disease—the type that can lead to heart attacks—among men and women having about one drink a day (a 14% and 18% drop, respectively), the odds of all sorts of cancers increased with each serving of alcohol. And just like that, word that no amount of alcohol was safe spread like red wine on a white tablecloth. "I got a lot of inquiries from patients," says David Katz, M.D., M.P.H., director of the Yale University Prevention Research Center at Griffin Hospital and an *EatingWell* advisory board member. "No question, the study really resonated and made people anxious."

However, look at the data more closely—and even speak to Griswold himself—and it's clear that these findings are not so different from a number of other recent studies that came to very different conclusions. In April 2019, for example, Angela Wood, Ph.D., a biostatistician at the University of Cambridge, published a paper (also in *The Lancet*) that examined alcohol's effects on different types of cardiovascular disease and death from any cause. After following almost 600,000 people for seven and a half years, on average, Wood found that the more you drink, the higher your odds of stroke, heart failure, fatal hypertensive disease, fatal aortic aneurysm and coronary disease. Heart-attack risk, on the other hand, was 6% lower among those consuming 100 grams of alcohol a week, or about a drink a day. Plus, overall risk of death didn't increase much at all until a person had more than that one daily drink. According to Wood's study, drinking moderate amounts of alcohol is not dangerous to your health. And a June 2018 study in *PLoS Medicine* found that alcohol intake of between one and three drinks a week did not raise cancer risk among older adults.

How can the science be so at odds? Because the actual data in Griswold's *Lancet* paper (as opposed to the summary of findings that frightened wine lovers everywhere) indicates only a tiny, tiny rise in disease risk up until about one alcoholic beverage per day, just like the other studies. "What we show—and Griswold and his colleagues show—is that overall risk appears to go up once you drink more than this," says Wood. Griswold concurs: "The risk increases at a very slow pace

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EACH 5-OUNCE GLASS OF WINE ADDS 125 CALORIES TO YOUR DAY—NOT HUGE, BUT ALSO NOT INSIGNIFICANT IN TERMS OF DAILY TOTALS.

to the point where I personally feel confident that if I have one drink a day, I'll be OK. I think our results track well."

The Tipsy Truth

So a little rosé now and then probably isn't helping you live longer, but it's also not dooming you to disease, either. The question is what level of risk you're willing to accept. In response to Griswold's paper, statistician David Spiegelhalter, Ph.D., chair of the Winton Centre for Risk and Evidence Communication at the University of Cambridge and an expert on communicating risk to the public, wrote, "Claiming there is no 'safe' level does not seem an argument for abstention. There is no safe level of driving, but governments do not recommend that people avoid driving. Come to think of it, there is no safe level of living, but nobody would recommend abstention."

Angela Wood put it in visceral terms. According to her research, if you drink more than one but less than two drinks per day, your life expectancy at age 40 might be six months shorter than if you have one or fewer alcoholic beverages daily. Consume between two and four drinks a day and statistically you'll live one to two years less. Spiegelhalter says going from one to two drinks per day is about the same, healthwise, as spending two more hours sitting on the couch (sedentary behavior is known to be bad for your health).

Indeed, the *Lancet* study's overall global statistics show that if 100,000 adults drink no alcohol for one year, 914 of them stand to develop one of the diseases the paper looks at. If the same 100,000 people consume one drink a day, 918 will develop one of those health problems. That's just four more cases. Drinking two servings of alcohol daily pushes that number up to 977 (63 more diagnoses), and knocking back five drinks per day means 1,252 people will develop a problem (338 more diagnoses).

Also worth noting: since the *Lancet* study used information from people all over the world—from Portugal to the Democratic Republic of Congo—the risk levels are very broad because they lump together those who reside in both high- and low-income countries, have vastly different diets and lifestyles, and drink different types of alcohol, from the finest wines to moonshine. They also suffer from different types of diseases. Tuberculosis, for one, is a major cause of alcohol-related death worldwide, but not so much in the U.S. "The study proved that populations don't derive a health benefit from alcohol. But it did not say anything about individuals who are careful about how much they drink," says Katz.

Your own likelihood of developing a particular disease from alcohol is probably quite different from your neighbor's or from that of society as a whole. People also have different variants of a gene called alcohol dehydrogenase that breaks down ethanol, helping your body process it more or less readily. Women, for example, tend to produce about half the alcohol dehydrogenase that men do, the main reason alcohol affects them more. Body size matters too. And everyone's odds of disease are different. "If you're a woman with no cardiovascular risk factors and a strong family history of breast cancer, you're more likely to be harmed, because alcohol appears to contribute to the risk of breast cancer," explains Katz. "But if you don't have a family history of cancer and you do have risk factors for heart disease, you could derive a health benefit from moderate amounts of alcohol." He points out that there are far safer ways to reduce your odds than relying on alcohol—like going for a walk every day. Still, it helps put things in perspective.

"The risk increases at a very slow pace to the point where I personally feel confident that if I have one drink a day, I'll be OK."

Studies on alcohol and health are ongoing, and no one pretends to have the final word. So for now, only you know the proper place of alcohol in your life. And if you choose to drink, enjoy it—preferably in the company of others. "Don't do it for health, but you need not give it up for health either," says Katz. "I drink wine because it's delightful. I'm not relying on that alcohol to make me healthy, but I include it judiciously in my diet because it's a source of great pleasure. And that should be the main motivation for drinking—pleasure."

Need help? If you or a loved one has a problem with alcohol, go to samhsa.gov or aa.org for support and treatment options in your area. ●

THE BENEFITS OF PLANTS

Plant-forward diets loaded with fruits and vegetables with fewer animal products have major links to healthier hearts.

BY SUNNY SEA GOLD

Some of the healthiest hearts in the United States can be found in a small Southern California city called Loma Linda. People live such long, healthy lives there that it's been designated one of the world's five Blue Zones—areas where people regularly live to age 100 and beyond. Many of the folks who live there are members of the Seventh-Day Adventist Church, a Protestant religion in which most members are vegetarians.

Adventists have other good habits, too—as a community, they typically don't smoke or drink, for example—but research suggests that diet is a major reason for their healthy hearts. "The evidence is strong that shifting toward a more plant-based diet will reduce risk of heart disease and have other benefits," says Walter Willett, M.D., one of the world's leading researchers on diet and health

and a professor of epidemiology and nutrition at Harvard's T.H. Chan School of Public Health. One study published in the journal *BMJ* in 2019 followed nearly 50,000 people in the U.K. for 18 years and found that vegetarians and vegans have a 22% lower risk of heart disease than meat-eaters. A 2017 meta-analysis of almost 100 studies concluded that vegetarians had a 25% lower risk of coronary artery disease than omnivores.

But you don't have to go fully vegan or vegetarian to see health benefits from eating more plants. For typical meat-loving Americans, simply moving toward a more plant-heavy, animal-light eating style is a great move, says Willett.

Many famously heart-healthy eating styles—such as the traditional Mediterranean diet and the anti-hypertension DASH diet—include fish and poultry and even occasional red meat. But the average American eats a little more than a pound of beef per week. "The most important step is to reduce consumption of red meat, which is particularly bad for personal and planetary health," says Willett. "Nuts, beans and soyfoods will be better alternatives, and including a modest amount of fish and poultry can also be part of the alternative package."

Berries are packed with antioxidants, and higher intake of these fruits has been linked with improvements in risk factors for heart disease.

A large 2015 study of more than 400,000 people found that those who got about 70% of their food from plants and 30% from animal products had a 20% lower risk of heart disease and stroke compared with people who got only 35% of their diet from plants.

WHERE, EXACTLY, DO THE PERKS OF PLANT-BASED eating come from? One benefit may be that you "crowd out" less-healthy foods, such as red meat and refined starches, because your plate is full of other things, says Kim Williams, M.D., chief of cardiology at Rush University Medical Center in Chicago, who went vegan to battle his own rising cholesterol. "But healthy plant foods provide essential nutrients that exceed their 'substitutionary' benefits," he notes. Plants contain a whole symphony of health-promoting substances, such as artery-protecting antioxidants.

"Antioxidants do amazing things for the health of your arteries, including dilating them for better blood flow and helping to prevent fatty plaques that can lead to heart attack and stroke," says Suzanne Steinbaum, D.O., a cardiologist at Mount Sinai Hospital and volunteer medical expert with the American Heart Association's Go Red for Women campaign. Berries, for example, are packed with antioxidants—and higher intake of these bright-colored fruits has been linked with improvements in several risk factors for heart disease. One meta-analysis of 22 randomized controlled trials found an association between berry intake and lower blood pressure and cholesterol.

The study also linked berries to lower markers of inflammation in the blood. Although inflammation doesn't necessarily cause heart disease, high levels are associated with a higher chance of having a heart attack or stroke. "We know inflammation is a huge part of what happens in plaque formation in coronary artery disease," says Steinbaum. Other plant foods, such as garlic, onions, ginger and turmeric, also have strong anti-inflammatory properties. Polyunsaturated fats, such as those in nuts, and olive oil are also potent inflammation fighters.

Another heart-healthy hero found in plant foods is fiber, notes Steinbaum. There are two kinds of fiber, soluble and insoluble. Insoluble keeps your GI tract healthy and reduces the risk of certain cancers; the soluble kind—found in beans, oats, barley, rye, nuts, bananas, oranges and onions—can lower your cholesterol.

EVOLUTIONARY ANTHROPOLOGISTS AGREE THAT our Paleolithic, hunter-gatherer ancestors lived, for the most part, on plant foods. The ancient Greeks and Egyptians were mostly vegetarian too. Somewhere along the way, as societies got wealthier and people were able to afford more meat, animals started taking up more space on our plates. But that's slowly starting to change: Americans are eating about 20% less beef than they were in 2005, according to the Natural Resources Defense Council, and plant foods are white-hot.

Between 2014 and 2016, more than 700 new

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INSTEAD OF SERVING ANIMAL PROTEIN AT EVERY DINNER, GO VEGETARIAN ONE DAY A WEEK.

packaged-food products making a "plant-based" claim on the label hit the market.

Amid this growing trend, it's important to remember that the word "plant" doesn't necessarily mean "health food," says Ashley Koff, R.D., CEO of The Better Nutrition Program in Columbus, Ohio. "Plants have fallen prey to marketing mania. We see more and more food products promoted as plant-based despite them actually being the hyper-processed remains of whole plants."

Williams says that meatless "meats" can be a smart option for carnivores looking to reduce their red-meat intake: "There are no studies linking even highly processed meat substitutes to increased health risks—and studies clearly show that plant protein reduces heart disease and overall mortality, while animal protein increases it." But it's still important to look out for large amounts of sodium and saturated fat in your fake meat, he says. Koff agrees. "Putting aside a complex environmental story, most of these new burgers are hyper-processed plant pieces," she says. "They aren't harmful and may be enjoyable, but they shouldn't be considered foundational or on par with whole or 'kitchen-processed' plants like beans or veggies you'd make at home. More importantly, if grabbing them out at a fast-food joint, buyer beware that while replacing the meat may be a win, the other stuff you order on or with them won't be."

Plants do have superpowers—and if you want a healthier heart, it's a good idea to eat more of them. But if you cut down on meat only to replace it with highly processed plant-based foods, you're not doing yourself any favors. "A detailed study of this was published in 2017, indicating that an unhealthy plant-based diet—fried foods, sweets, refined grains, juice—is associated with more heart disease than an animal-based diet," says Williams.

The bottom line for heart health, says Steinbaum, is still best summed up by Michael Pollan in his best-selling book *In Defense of Food*: "Eat food. Not too much. Mostly plants." ●

Plant-Based Recipes

No salads here. These satisfying vegan recipes will keep you full while protecting your heart.

Zucchini-Chickpea Veggie Burgers with Tahini-Ranch Sauce

ACTIVE: 25 min
TOTAL: 25 min

- **4 tablespoons tahini, divided**
- **1 tablespoon lemon juice**
- **3 teaspoons white miso, divided**
- **1¼ teaspoons onion powder, divided**
- **1¼ teaspoons garlic powder, divided**
- **1¼ teaspoons ground pepper, divided**
- **2 tablespoons water**
- **1 teaspoon chopped fresh chives plus 2 tablespoons, divided**
- **1 15-ounce can no-salt-added chickpeas, rinsed**
- **1 teaspoon ground cumin**
- **¼ teaspoon salt**
- **¼ cup fresh parsley leaves**
- **½ cup shredded zucchini**
- **⅓ cup old-fashioned rolled oats**
- **1 tablespoon extra-virgin olive oil**
- **4 whole-grain hamburger buns, toasted**
- **1 cup packed fresh arugula**
- **4 slices tomato**

1. Combine 2 tablespoons tahini, lemon juice, 1 teaspoon miso, ½ teaspoon onion powder, ¼ teaspoon garlic powder and ¼ teaspoon pepper in a small bowl. Gradually whisk in water until the mixture is smooth. Stir in 1 teaspoon chives. Set aside.

2. Place chickpeas, cumin, salt and the remaining 2 tablespoons tahini, 2 teaspoons miso, 1 teaspoon garlic powder, 1 teaspoon pepper and ¾ teaspoon onion powder in a food processor. Pulse, stopping once or twice to scrape down the sides, until a coarse mixture forms that holds together when pressed. Add parsley and the remaining 2 tablespoons chives; pulse until the herbs are finely chopped and incorporated into the mixture. Transfer to a bowl.

3. Squeeze zucchini in a clean kitchen towel to remove extra moisture. Add the zucchini and oats to the chickpea mixture; use your hands to combine, pressing to mash together. Form into 4 patties.

4. Heat oil in a large nonstick skillet over medium-high heat. Add the patties and cook until golden and beginning to crisp, 4 to 5 minutes. Carefully flip and cook until golden brown, 2 to 4 minutes more.

5. Serve the burgers on buns with the tahini-ranch sauce, arugula and tomato slices.

SERVES 4: 1 burger each
CAL 373 / **FAT** 15G (SAT 2G) / **CHOL** 0MG / **CARBS** 49G / **TOTAL SUGARS** 5G / **PROTEIN** 13G / **FIBER** 9G / **SODIUM** 531MG

+ MAKE EXTRA SAUCE—IT'S A GREAT DIP FOR VEGGIE STICKS—AND THIN WITH A LITTLE WATER FOR A SALAD DRESSING.

Chinese Sweet & Sour Tofu Stir-Fry with Snow Peas

ACTIVE: 30 min
TOTAL: 2 days

- **1 14-ounce package water-packed firm tofu**
- **⅔ cup pineapple juice**
- **½ cup ketchup**
- **1 tablespoon reduced-sodium soy sauce**
- **1 tablespoon cornstarch**
- **2 tablespoons vegetable oil**
- **1 tablespoon minced fresh ginger**
- **8 ounces snow peas (4¼ cups), trimmed**
- **2 tablespoons thinly sliced scallions**

1. One to three days before cooking, drain and rinse tofu. Wrap in foil and freeze until solid, at least 3½ to 4 hours. One day before cooking, place the tofu in a bowl and transfer to the refrigerator to thaw overnight.

2. Place the thawed tofu on a plate lined with a double layer of paper towels. Cover with another 2 paper towels, place a plate on top and set a weight, such as 2 cans of beans, on the plate. Let stand for 20 minutes.

3. Combine pineapple juice, ketchup and soy sauce in a small bowl; set aside.

4. Cut the pressed tofu into 12 slices, a scant ½ inch thick. Lightly dust both sides with cornstarch.

5. Heat a 12-inch stainless-steel skillet (or 14-inch flat-bottomed carbon-steel wok) over high heat until a drop of water vaporizes within 1 to 2 seconds of contact. Swirl in oil, reduce heat to medium and add the tofu in an even layer. Cook until light golden on the bottom, about 1 minute. Turn over, sprinkle with ginger and cook until the second side is light golden, 1 minute more.

6. Remove from heat. Add snow peas and the reserved sauce. Cover and let stand until the sauce stops sputtering, about 30 seconds. Uncover, return the pan to medium heat, and stir-fry until the sauce is well distributed and the peas are tender-crisp, 1 to 2 minutes. Sprinkle with scallions.

SERVES 4: 1 cup each
CAL 225 / **FAT** 11G (SAT 2G) / **CHOL** 0MG / **CARB** 23G / **TOTAL SUGARS** 15G / **PROTEIN** 11G / **FIBER** 3G / **SODIUM** 504MG

THE SAUCE CAN BE PREPARED 3 DAYS AHEAD AND THE MEATBALLS 1 DAY AHEAD. REFRIGERATE SEPARATELY.

Vegan Meatballs

ACTIVE: 40 min
TOTAL: 1 hr 10 min

- 2½ cups small cauliflower florets
- 8 ounces white mushrooms, halved
- ½ small onion, coarsely chopped
- 2 large cloves garlic, divided
- 4 tablespoons extra-virgin olive oil, divided
- 1½ teaspoons Italian seasoning, divided
- ½ teaspoon salt, divided
- ¼ teaspoon ground pepper
- 1 tablespoon tomato paste
- 1 cup canned chickpeas
- 2 cups cooked quinoa
- 1 tablespoon reduced-sodium tamari or soy sauce
- 1 28-ounce can no-salt-added crushed tomatoes
- ½ teaspoon crushed red pepper
- 2 tablespoons chopped fresh basil

1. Preheat oven to 400°F. Coat a large rimmed baking sheet with cooking spray.

2. Pulse cauliflower, mushrooms, onion and 1 garlic clove in a food processor until finely chopped, about 15 pulses. Heat 2 tablespoons oil in a large skillet over medium-high heat. Add the cauliflower mixture, ¾ teaspoon Italian seasoning and ¼ teaspoon each salt and pepper; cook, stirring, until softened, about 5 minutes. Add tomato paste and cook, stirring, for 1 minute more. Transfer to a large bowl and let cool, stirring a few times, for 5 minutes.

3. Add chickpeas to the food processor; puree until smooth. Add the chickpea mixture to the large bowl along with quinoa and tamari (or soy sauce); stir to combine. Form the mixture into 24 balls (about 2½ tablespoons each) and place on the prepared baking sheet.

4. Bake the meatballs until heated through and firm, 20 to 25 minutes. Let cool on the baking sheet for 3 minutes.

5. Meanwhile, finely chop the remaining garlic clove. Heat the remaining 2 tablespoons oil in a large skillet over medium heat. Add the garlic, tomatoes, crushed red pepper and the remaining ¾ teaspoon Italian seasoning and ¼ teaspoon salt. Bring to a simmer. Cook until the flavors have melded, about 5 minutes. Serve the meatballs with the sauce, sprinkled with basil.

SERVES 6: 4 meatballs & ½ cup sauce each
CAL 394 / **FAT** 17G (SAT 2G) / **CHOL** 0MG / **CARBS** 46G / **TOTAL SUGARS** 12G / **PROTEIN** 13G / **FIBER** 10G / **SODIUM** 434MG

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Last Sip

Matcha Madness

This Japanese powder is a trendy—and delicious—way to enjoy green tea.

BY JESSICA MIGALA

Earthy and smooth, matcha isn't your ordinary tea. Unlike brews that involve steeping and then discarding the leaves, this shade-grown Japanese tea is a fine powder that is dissolved in hot water. Because you consume the entire leaf, you get more antioxidants, such as EGCG, which may help regulate blood pressure. In fact, drinking 12 ounces a day of even regular green tea could reduce your odds of heart disease by 26%, according to research in the *Annals of Epidemiology*. Plus, matcha contains L-theanine, an amino acid that may help you feel both calm and alert.

+

IN YOUR BLENDER, ADD 1 TEASPOON OF MATCHA TEA POWDER TO YOUR FAVORITE SMOOTHIE RECIPE BEFORE BLENDING. THE SUBTLE TASTE GOES WELL WITH ANY FLAVOR.

+

MIX ½ TEASPOON INTO 1 CUP PLAIN YOGURT AND SWEETEN WITH A LITTLE SYRUP OR HONEY FOR A SIMPLE, GREEN SNACK.

+

BEYOND TEA: GIVE YOUR BAKED GOODS A SLIGHTLY EARTHY NOTE (AND A COOL GREEN HUE!) BY ADDING 1 TO 2 TEASPOONS OF MATCHA TEA POWDER TO ANY MUFFIN, COOKIE OR PANCAKE RECIPE.

Of Sound Heart

From top foods to prevent heart disease to lifestyle strategies that help maintain good cardio health, here are proven ways to keep your heart beating strong for years to come.